First Nations Water Rights in British Columbia

A Historical Summary of the rights of the Cape Mudge First Nation

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WATER MANAGEMENT BRANCH

FIRST NATIONS WATER RIGHTS IN BRITISH COLUMBIA:

A Historical Summary of the rights of the Cape Mudge First Nation

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Gary Robinson
Project Manager
Water Management Branch

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FIRST NATIONS WATER RIGHTS REPORT

BAND: Cape Mudge Band

ADDRESS: P.O. Box 220, Quathiaski Cove, B.C., V0P 1N0

CHIEF: Ralph Dick

PHONE: 285-3316 **FAX:** 285-2400

AFFILIATION: Kwakiutl District Council

LOCATION:

The Cape Mudge Band occupy 668.3 hectares in lands, divided into 5 reserves in the Campbell River area. The reserves are:

Cape Mudge 10	Drew Harbour 9	Open Bay 8
Quinsam 12	Village Bay 7	

Of the reserve lands, water rights have been licensed on:

- Cape Mudge 10 - a 446.5 hectare reserve located on the southwestern shore of Quadra Island.
- Quinsam 12 - a 116,3 hectare reserve located west of the municipality of Campbell River.

The most recent population figures compiled by the Ministry of Finance report that the Cape Mudge Band has 312 persons living on-reserve, and 425 persons living off-reserve, for a total population of 764 registered members.

The five reserves of the Cape Mudge Band occur in the Coastal Western Hemlock Biogeoclimatic Zone. The reserves sit at elevations ranging from sea level to 300 feet above mean sea level, and experience a climate in which average daily temperatures range from lows of -5 degrees centigrade in January to highs of 16 degrees centigrade in July. Average rainfall totals for the area range between 100 and 250 centimetres, annually.

Water courses of significance include:

- Indian Reserve Springs - situated in Cape Mudge Reserve No. 10.
- Quinsam River - flows adjacent to Quinsam Reserve 12 and drains into the Campbell River.

WATER ALLOCATIONS:

There are no records of water allocations made by either the Indian Reserve Commission, the Lieutenant Governor-in-Council (by Order-in-Council), or by Orders of the Board of Investigation.

The water rights of the Band have been determined by two actions of government over the years:

1) Granting of water licenses in response to Federal Government applications requesting authorization for the use of water on reserve lands.

2) Actions to amend, cancel or record as abandoned rights, licensed rights, pursuant to provisions in the *Water Act*.

HISTORY, CURRENT STATUS AND NOTES:

The history of water rights, the current status of rights, and notes for the Cape Mudge Band with respect to Indian Reserve Springs and Quinsam River are as follows:

Indian Reserve Springs:

History:

Feb 1, 1963 In accordance with an application made by the Director of Indian Affairs on behalf of the Cape Mudge Band, the Comptroller of Water Rights issued Conditional Water Licence 27785. The Licence has a precedence date of July 24, 1962 and authorizes the diversion of 30,000 gallons a day for waterworks purposes. The appurtenant lands are specified as Cape Mudge Reserve No. 10.

Current Status:

Final Water Licence 27785, issued for the use and benefit of the Cape Mudge Band, is the only active Licence on Indian Reserve Springs.

The Water Survey of Canada has no records of streamflow for Indian Reserve Springs.

Notes:

1. There is no additional information with respect to the rights of the Cape Mudge Band on Indian Reserve Springs.

Quinsam River:

History:

Dec 15, 1939 — In accordance with an application made by the Minister of Lands on behalf of the Cape Mudge Band, the Comptroller of Water Rights issued Conditional Water Licence 14336. The Licence has a precedence date of September 7, 1939 and authorizes the diversion of 10 acre feet per year (from April 1 to September 30) from Quinsam River for irrigation purpose. Of this amount, 500 gallons per day can be used for domestic purposes. The appurtenant lands are defined as 4.4 acres of a 13.19 acre parcel of Quinsam Reserve No. 12.

Nov 1, 1949 — Based on the extent to which the rights granted under Conditional Water Licence 14336 were being exercised, the Comptroller of Water Rights issued Final Water Licence 13573 (in substitution of Conditional Water Licence 14336) to the Minister of Lands and Forests. The Licence was given a precedence date of September 7, 1939 and authorizes the diversion of 12.7 acre feet per year (from April 1 to September 30) from Quinsam River. The appurtenant lands are defined as a 13.19 acre parcel of Quinsam Reserve No. 12, of which 12.7 acres may be irrigated.

Feb 19, 1963 — In accordance with an Application for Change of Works made on behalf of the Cape Mudge Band, the Comptroller of Water Rights issued an Order embodying the change of works for Final Water Licence 13573.

Mar 1, 1972 — A memo from the Engineering Division stated that the land to which Final Water Licence 13573 was appurtenant was leased by the Forest Service from the Indian Affairs Branch. The lease was noted as expired February 1, 1969 and therefore, the memo recommended that the associated Licence should be canceled.

Apr 7, 1972 In a letter from the Cape Mudge Band Manager, the Council requested that Final Water Licence 13573 be renewed in the Band's name.

Apr 25, 1972 Subsequent to this request, the Comptroller of Water Rights amended the Licence to show it in the name of the Indian Affairs Branch. It is further stated that only if the Cape Mudge Band obtained 'Municipal Status', would the Final Water Licence be issued in the Band's name.

Jun 17, 1996 In accordance with the Band's request to renew Final Water Licence 13573, the water rights authorized under Final Licence 13573, were transferred from the Ministry of Forests to the Cape Mudge Band.

Current Status:

There are currently 3 active licenses on Quinsam River, one of which is held by the Cape Mudge Band. Of the 3 licenses:

- 1 authorizes the use of 12.7 acre feet of water for irrigation purposes.
- 1 authorizes the use of 75 acre feet of water for frost protection purposes.
- 1 authorizes the use of 10 cubic/feet second for conservation purposes.

The rights held by the Cape Mudge Band under Final Water Licence 13573 are first in priority on the Quinsam River.

The Water Survey of Canada operated station 08HD005 on Quinsam River from 1956 to 1990. During this period, the station recorded a minimum daily discharge on September 21, 1956 of .889 m^3/sec (31.39 cubic feet/sec). A maximum daily discharge was recorded on January 19, 1968, totaling 218 m^3/sec (7698.4 cubic feet/sec). Generally mean monthly discharges reached lows of approximately 2.2 m^3/sec in August, and rose to highs in the range of 17.1 m^3/sec in December.

Notes:

1. The issuance of Final Water Licence 13573 (which substituted Conditional Water Licence 14336) resulted in the loss of authorization for the domestic use of water from the Quinsam River, for the Cape Mudge Band.

OTHER INFORMATION:

Groundwater Records:

A review of well records maintained by the MELP - Groundwater Section found that 3 wells have been reported on Cape Mudge Reserve No. 10. Well No. 4 is reported to yield 50 gallons per minute; Well No.'s 3 and 5 are reported to have no yield. The extent to which these wells are currently utilized is unknown. Further details have been appended to the report.

As provision of information to the Groundwater Section is voluntary, this review should not be assumed to be complete.

Alternate Water Sources:

The proximity of Quinsam Reserve No. 12 to the City of Campbell River presents the potential for water supply to the reserve via connection to the City's municipal water system.

Quinsam River, should also be considered as an alternate water source.

Water Protection Records:

The Water Protection Section has records of a dyke existing on Discovery Passage. Specifics on the size and other characteristics of the structure are not documented in the Water Protection Section files. The dykes and banks protection are reportedly maintained by the Band.

ATTACHMENT 1

Summary of Water Rights Records

Cape Mudge Band

Water Source	Priority Date	Reserve Name	File No.	Document Type	Status	Superceded By	License PUC/MOD & OIC Allotments	Comments
Indian Reserve Springs	1962/07/24	Cape Mudge 10	0245179	CL 27785	Current		30,000 GAD/Waterworks	CL 27785: **Priority 1** - Indian Reserve Springs
Quinsam River	1939/09/07	Quinsam 12	0136633	CL 14336	Superceded	FL 13573	500 GAD/Domestic 10 AF/Irrigation	CL 14336: Issued in name of "**Minister of Lands**"; on behalf of the Cape Mudge Band".
Quinsam River	1939/09/07	Quinsam 12	0136633	FL 13573	Current		12.7 AF/Irrigation	CL 14336: Issued in name of "**Minister of Lands and Forests**"; on behalf of the Cape Mudge Band". Transfer of License (June 1996): License transferred from Min. of Forests to **Cape Mudge Band**. **Priority 1** - Quinsam River.
Discovery Passage	Unknown			Water Protection Records: Summary	Current			Water Protection Section Summary Records: **Dyke** along Discovery Passage; **Maintained by Band**.

LEGEND:

Licence Types (Document Types)
CL: Conditional Licence
FL: Final Licence

Mechanisms for Allocation (Document Type)
OIC: Order-in-Council (as issued by the Luitenant Governor in Council)
MOD: Minute of Decision (as recorded under the Indian Reserve Commission)
IRC: Indian Reserve Commission
AGBC: Attorney Generals Office of BC (followed by File #)

Allotment Units (Licence PUC/MOD & OIC Allotments)
GAD: Gallons a day
AF: Acre feet
CFS: Cubic feet per second

ATTACHMENT 2

W.R.B. 1932—4M-1218-7217

PROVINCE OF BRITISH COLUMBIA. | WATER RIGHTS BRANCH. | DEPARTMENT OF LANDS.

CONDITIONAL WATER LICENCE.

The Honourable the Minister of Lands of Victoria, B. C., is of the Province of British Columbia,

hereby authorized to divert and use water as follows:—

(a.) The source of the water-supply is Quinsam river, tributary of Campbell river.

(b.) The point of diversion is located as shown on the attached plan.

(c.) The date from which this licence shall have precedence is 7th September, 1939.

(d.) The purpose for which the water is to be used is irrigation and domestic.

(e.) The maximum quantity of water which may be diverted is 10 acre feet per annum of which quantity 500 gallons a day may be used for domestic purpose and such additional quantity as the District Engineer may from time to time determine should be allowed for losses.

(f.) The period of the year during which the water may be used for irrigation is 1st April to 30th September and for domestic use the whole year.

(g.) The land upon which the water is to be used and to which this licence is appurtenant is 4.4 acres of a 13.19 acre parcel of Indian Reserve No. 12, Quinsam,

(h.) The works for the diversion and carriage of the water are pump and pipes as shown on the attached plan.

(i.) and shall be commenced on or before the 30th day of April, 1940 and shall be completed and the water beneficially used on or before the 31st day of December, 1941.

Superseded by Final Licence 13573

PROVINCIA
WATER RIGHTS BRANCH
E. Davis
Comptroller of Water Rights.

ENTERED ON
Map No. 4821
By D.S.M.

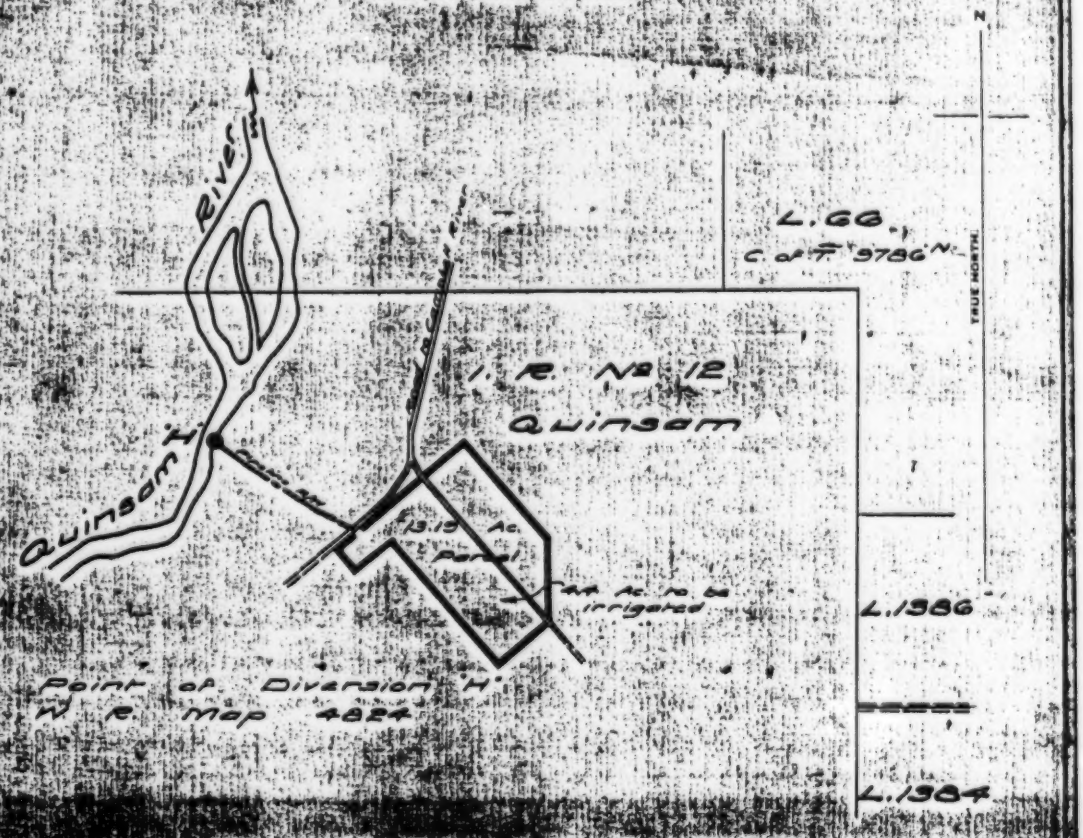
File No. 0136635 Date issued December 15, 1939. Licence No. 14336

British Columbia.

To accompany Conditional Licence No. 14336

NANAIMO WATER DISTRICT.

Scale, 10 Chains to 1 Inch.



Signature: E. A. Davis

Date: 15th Dec, 1939

EXHIBIT "A"

C.L. (14336)

File 0736639

WATER RESOURCES SERVICE
WATER RIGHTS BRANCH

DEPARTMENT OF LANDS, FORESTS, AND WATER RESOURCES

WATER ACT

CONDITIONAL WATER LICENCE

Director of Indian Affairs of Ottawa, Ontario,

is/are hereby authorized to divert and use water as follows:—

(*a*) The source(s) of the water-supply is/are Indian Reserve Springs.

(*b*) The point(s) of diversion is/are located as shown on the attached plan.

(*c*) The date from which this licence shall have precedence is 24th July, 1962.

(*d*) The purpose for which the water is to be used is waterworks.

(*e*) The maximum quantity of water which may be diverted is 30,000 gallons a day,

and such additional quantity as the Engineer may from time to time determine should be allowed for losses.

(*f*) The period of the year during which the water may be used is the whole year.

(*g*) The land upon which the water is to be used and to which this licence is appurtenant is Indian Reserve No.10, "Cape Mudge", Quadra Island.

(*h*) The works authorized to be constructed are intakes, tanks and pipe,

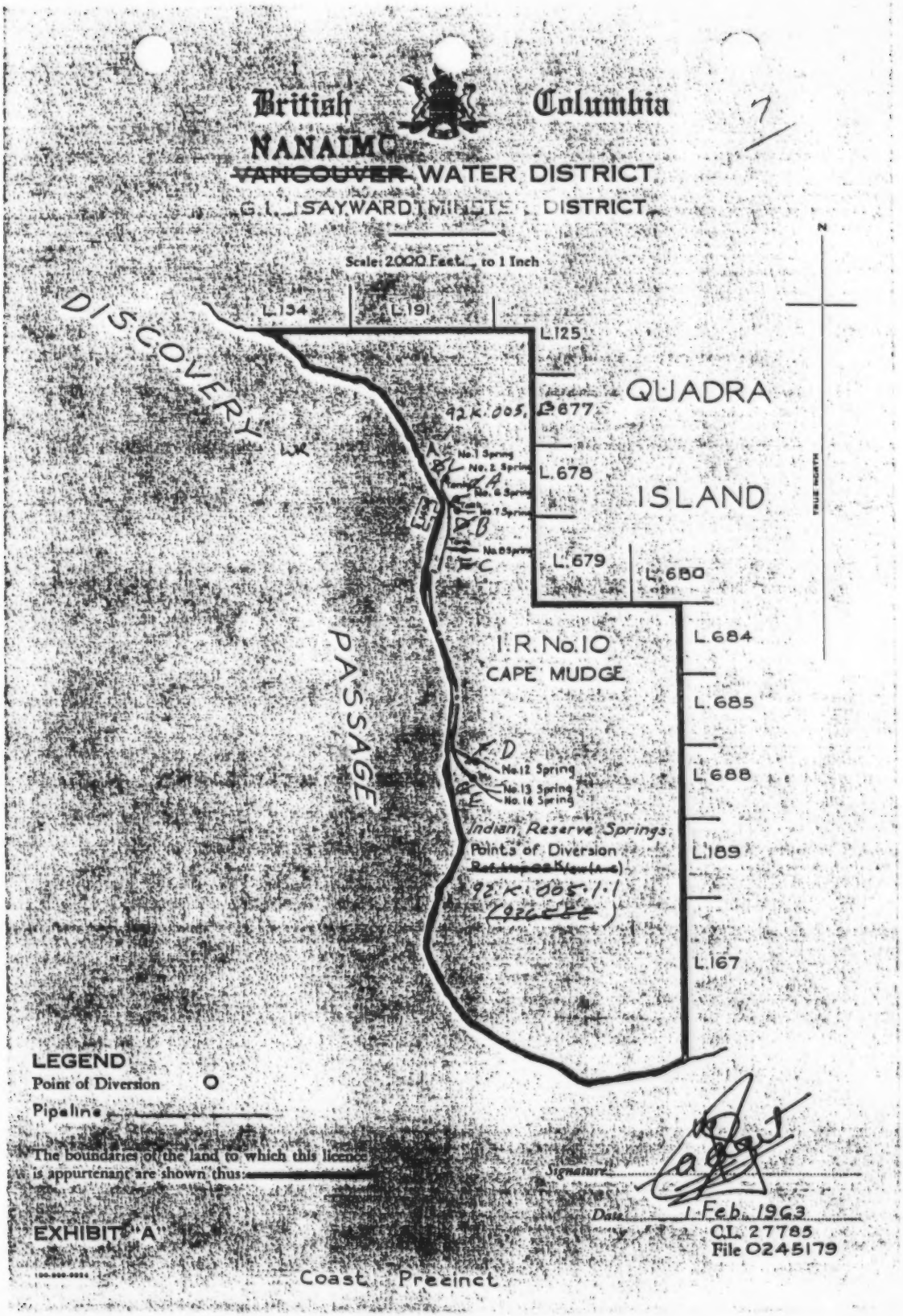
and they shall be located approximately as shown on the attached plan.

(*i*) The construction of the said works has been commenced, and shall be completed and the water beneficially used on or before the 31st day of December, 1965.

92K/SW (A.G.)
R.M.

A. P. Pacey,
COMPTROLLER OF WATER RIGHTS.

FILE No. 0245179 Date issued: 1 February, 1963 LICENCE No. 27785


British Columbia
NANAIMO
~~VANCOUVER~~ WATER DISTRICT
G.I. SAYWARD MINING DISTRICT
Scale: 2000 Feet to 1 Inch
DISCOVERY PASSAGE
L.134
L.191
L.125
QUADRA ISLAND
92K.005
L.677
No.1 Spring
No.2 Spring
No.6 Spring
No.7 Spring
No.8 Spring
L.678
L.679
L.680
I.R. No.10
CAPE MUDGE
L.684
L.685
L.688
L.189
L.167
No.12 Spring
No.13 Spring
No.14 Spring
Indian Reserve Springs
Points of Diversion
92.K.005.1.1
TRUE NORTH
LEGEND
Point of Diversion
Pipeline
The boundaries of the land to which this licence is appurtenant are shown thus:
EXHIBIT "A"
Coast Precinct
Signature
Date 1 Feb. 1963
C.L. 27785
File 0245179

ORDER

WATER ACT

Section 15

FILE NO. 0136633

In the matter of Final Water Licence 13573 which authorizes the diversion of 12.7 acre feet per annum from Quinsam River for the irrigation of 12.7 acres of a 13.19 acre parcel of Indian Reserve #12, Quinsam.

Being satisfied that no persons' rights will be injuriously affected, I hereby authorize the construction of a new intake and pipeline to be located approximately as shown on the attached amended plan.

The construction of the said works shall be completed and water beneficially used on or before the 31st day of December, 1964.

Dated at Victoria, B.C., this 19th day of February, 1963.

Gordon J.A. Kidd,
Deputy Comptroller of Water Rights.

W.R.B. 17—5M-249-7750 (2)

PROVINCE OF BRITISH COLUMBIA

Water Rights Branch

DEPARTMENT OF LANDS AND FORESTS

FINAL WATER LICENCE

THE HONOURABLE THE MINISTER OF LANDS AND FORESTS (FOREST SERVICE) of Victoria, B. C. is hereby authorized to divert and use water as follows:—

(a) The source of the water-supply is Quinsam River, tributary of Campbell River.

(b) The point of diversion is located as shown on the attached plan.

(c) The date from which this licence shall have precedence is 7th September 1939.

(d) The purpose for which the water is to be used is Irrigation.

(e) The maximum quantity of water which may be diverted is 12.7 acre feet per annum, and such additional quantity as the Engineer may from time to time determine should be allowed for losses.

(f) The period of the year during which the water may be used is 1st April to 30th September.

(g) The land upon which the water is to be used and to which this licence is appurtenant is a 13.19 acre parcel of Indian Reserve No. 12, Quinsam, of which 12.7 acres may be irrigated.

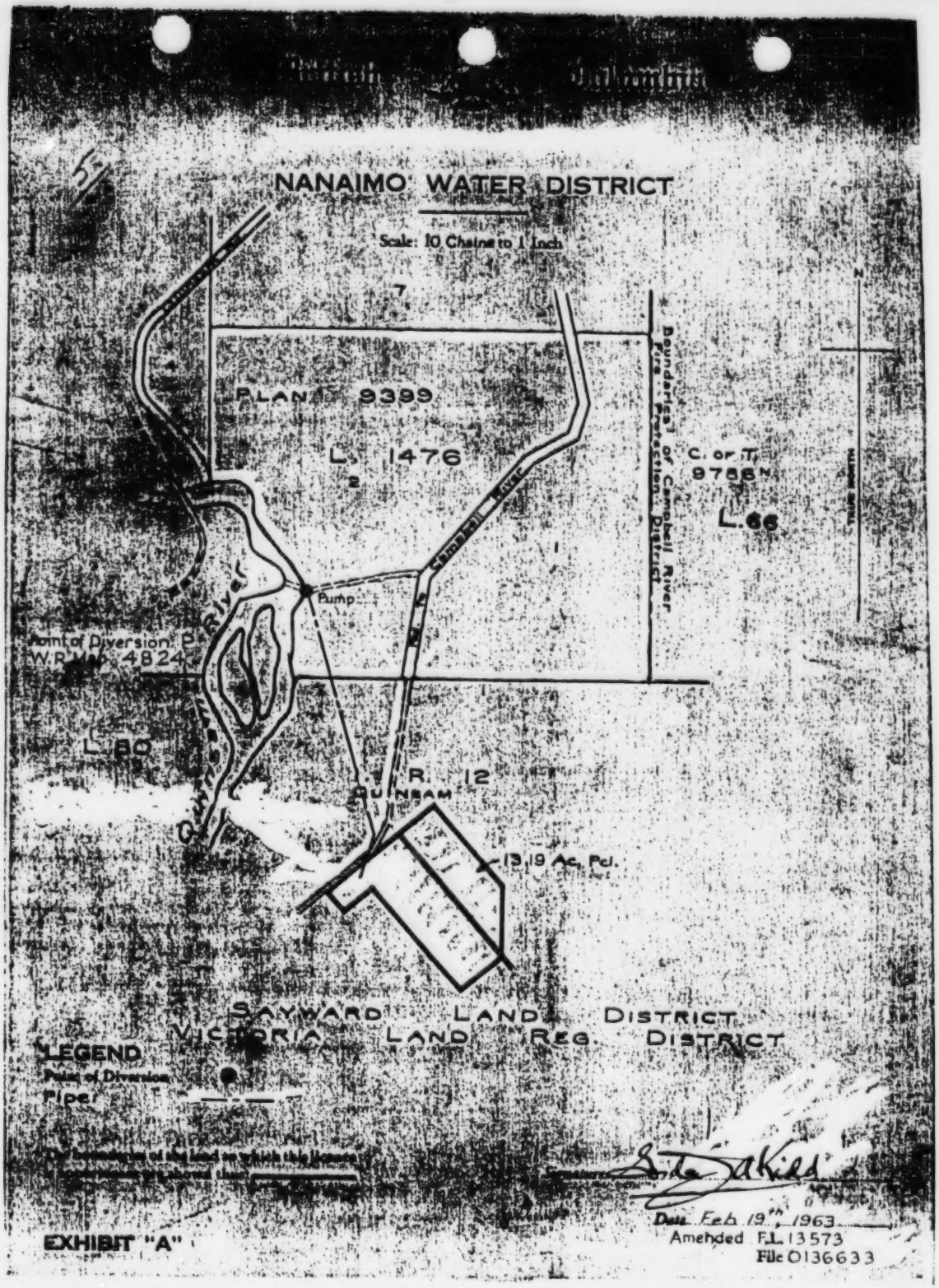
(h) The works authorized hereunder are pump and pipe located as shown on the attached plan.

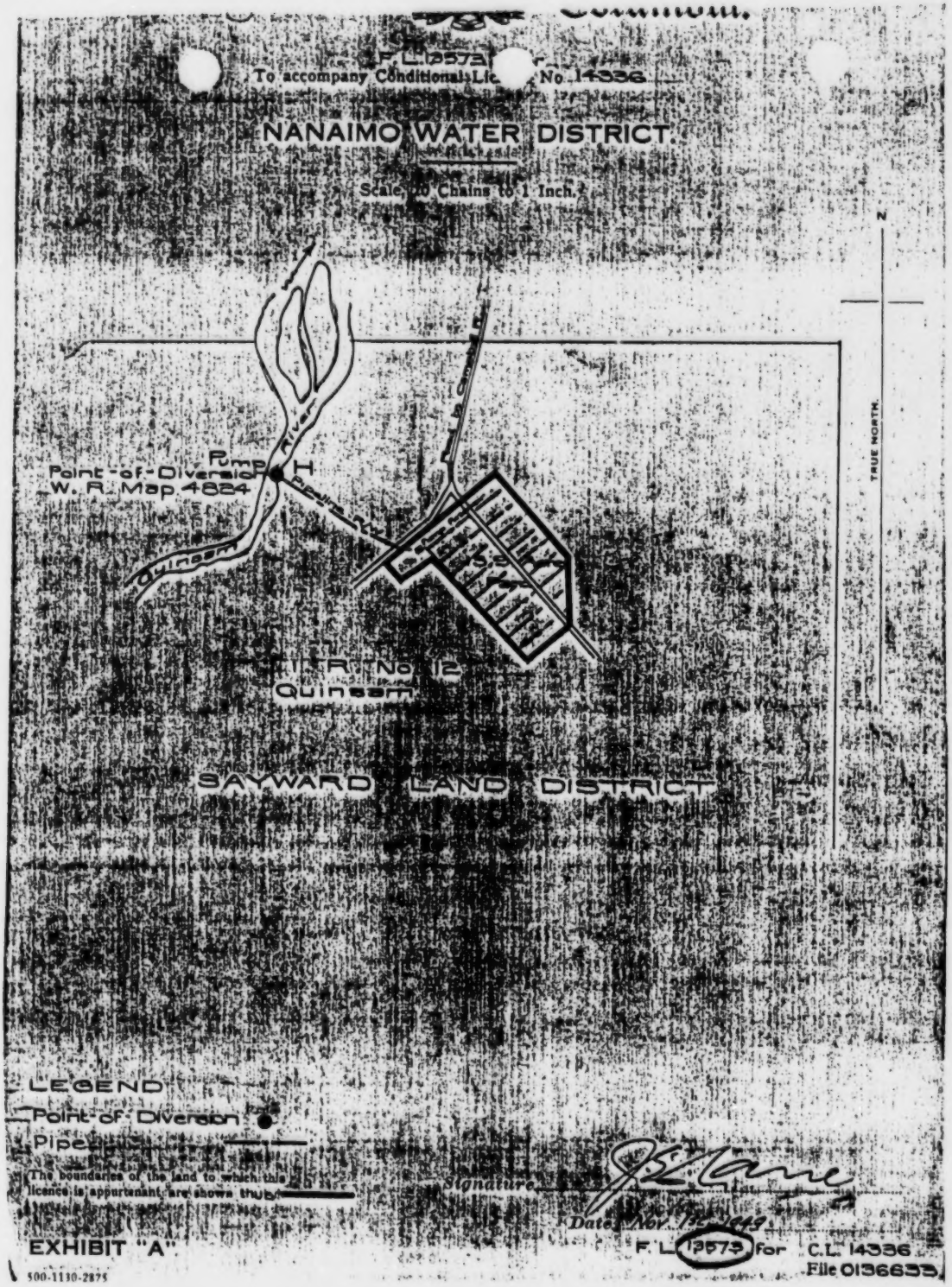
(i) This licence is issued in substitution of Conditional Water Licence No. 14336.

ENTERED ON Map No. 4924 By

Deputy *Comptroller of Water Rights.*

File No. 0136633 Date issued Nov. 1, 1949 Licence No. 13573


NANAIMO WATER DISTRICT
Scale: 10 Chains to 1 Inch
PLAN 9399
L. 1476
2
1
C. or T.
8788N
L.66
Boundary of Campbell River Water Protection District
Pump
Point of Diversion P.
W.R.Map 4824
L.80
R. 12
QUINSAM
13.19 Ac. Pcl.
SAYWARD LAND DISTRICT
VICTORIA LAND REG. DISTRICT
LEGEND
Point of Diversion
Pipe
EXHIBIT "A"
Date Feb 19th, 1963
Amended F.L. 13573
File 0136633


To accompany Conditional Lic No. 14336
NANAIMO WATER DISTRICT.
Scale, 20 Chains to 1 Inch.
N
TRUE NORTH.
Pump
Point-of-Diversion
W. R. Map 4824
Quinsam River
Quinsam
I.R. No. 12
SAYWARD LAND DISTRICT
LEGEND
Point-of-Diversion
Pipe
The boundaries of the land to which this licence is appurtenant are shown thus
Signature
Date Nov. 15th 1949
EXHIBIT "A"
F. L. 13573 for C.L. 14336
File 0136633
500-1130-2875

ATTACHMENT 3

Report Requested By : CROCMA
Date Report Requested : 1996/06/14 16:01
Report Sorted By : Source Gazetted - Priority Date - Licence Number
Selection Criteria
START POINT : PD30806 - 92.K.005.1.1 D
END POINT : SO16244 - Indian Reserve Spring No. 12

Priority YYYY/MM/DD	Licence Number	File Number	Appurtenancy	Licensee	PUC	Quantity/Units	Term Start	Term End	Licence Comments	Process Status
1962/07/24	C027785	0245179	IR # 10 CAPE MUDGE QUADRA I SAYWARD DIST	CAPE MUDGE INDIAN BAND 978-623-6968 BOX 220 QUATHIASKI COVE BC V0P1N0	WWROT	30,000.00 GD	Jan 01	Dec 31		

Source	WR Map	POD	RED POD	Comments	Prec
Indian Reserve Spring No. 12	WR92.K.005.1.1	D	N		178 NAN - SAYWARD
Indian Reserve Spring No.1&2	WR92.K.005.1.3	A	N		
Indian Reserve Spring No. 6	WR92.K.005.1.1	A	N		
Indian Reserve Spring No. 7	WR92.K.005.1.1	B	N		
Indian Reserve Spring No. 8	WR92.K.005.1.1	C	N		
Indian Reserve Spring No.13&14	WR92.K.005.1.1	E	N		

---------- Total of 1 Licence Reported ----------

Stream Register Report Water Licence Information System

Report Requested By : CROCHA
Date Report Requested : 1996/06/17 09:55
Report Sorted By : Source Gazetted - Priority Date - Licence Number
Selection Criteria
START POINT : H016706 - Quinsam Lake on Quinsam River
END POINT : S016560 - Quinsam River right of Campbell River

Stream Register Report

Water Licence Information System

DATE: 1996/06/17
TIME: 09:55
PAGE: 001

Priority YYYY/MM/DD	Licence Number	File Number	Appurtenancy	Licensee	PUC	Quantity/Units	Term Start	Term End	Licence Comments	Process Status
Source			WR Map	POD	RED POD Comments				Prec	
1939/09/07	F013573	0136633	12.7 AC OF 13.19 AC PARCEL OF I R #12 QUINSAM SAYWARD DIST	CAPE MUDGE INDIAN BAND 978-623-6969 BOX 220 QUATHIASKI COVE BC V0P1N0	IRR	12.70 AF	Apr 01	Sep 30		
Quinsam River			WR4824	P	N				17C NAN - COURTENAY	
1958/01/22	C024242	0218980	50 AC OF LS 1 & 2 OF L 1476 SAYWARD DIST PLAN 9399	FORESTS MINISTRY OF VANCOUVER REGION 4595 CANADA WAY BURNABY BC V5G4L9	FROST	75.00 AF	Jan 01	Dec 31	TREE SPRAYING	
Quinsam River			WR4824	P	N				17C NAN - COURTENAY	
1972/02/22	C039943	0309655	CONS PROJECT OF LICENSEEE WITHIN L 80 SAYWARD DIST	FISHERIES & OCEANS CANADA 400 - 555 W HASTINGS ST VANCOUVER BC V6B5G3	COMUS	10.00 CS	Jan 01	Dec 31		
Quinsam River			WR4824	W	N				17C NAN - COURTENAY	

---------- Total of 3 Licences Reported ----------

ATTACHMENT 4

QUILCHENA CREEK AT QUILCHENA - STATION NO. 08LG017

ANNUAL EXTREMES OF DISCHARGE AND ANNUAL TOTAL DISCHARGE FOR THE PERIOD OF RECORD

YEAR	MAXIMUM INSTANTANEOUS DISCHARGE (m^3/s)	MAXIMUM DAILY DISCHARGE (m^3/s)	MINIMUM DAILY DISCHARGE (m^3/s)	TOTAL DISCHARGE (dam^3)	YEAR
1933	---	7.39 ON JUN 08	0.042 ON AUG 19	---	1933
1965	---	---	---	---	1965
1966	---	3.40 ON MAY 15	0.048 ON SEP 09	---	1966
1967	---	14.2 ON JUN 06	0.051 ON SEP 21	---	1967
1968	---	10.1 ON JUN 11 *	0.054 ON AUG 20	---	1968
1969	---	7.67 ON MAY 17	0.034 ON AUG 29	---	1969
1970	---	1.36 ON MAY 31	0 ON JUL 17 *	---	1970
1971	---	9.34 ON JUN 06	0.004 ON AUG 18	---	1971
1972	---	16.9 ON JUN 01	0.085 ON SEP 11	---	1972
1973	---	3.20 ON MAY 21	0.001 ON AUG 14	---	1973
1974	---	10.8 E ON JUN 18	0.099 ON JUL 30	---	1974
1975	---	---	---	---	1975
	E - ESTIMATED	* - EXTREME RECORDED FOR THE PERIOD OF RECORD		---	MEAN

QUINN CREEK NEAR CASTLEDALE - STATION NO. 08NA028

MONTHLY AND ANNUAL MEAN DISCHARGES IN CUBIC METRES PER SECOND FOR THE PERIOD OF RECORD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	YEAR
1930	---	---	---	---	---	0.100	0.027	0.012	0.010	---	---	---	---	1930
1931	---	---	---	---	---	---	0.022	0.008	0.008	---	---	---	---	1931
MEAN	---	---	---	---	---	0.100	0.025	0.010	0.009	---	---	---	---	MEAN

LOCATION - LAT 51 02 32 N LONG 116 32 26 W DRAINAGE AREA, 6.48 km^2 NATURAL FLOW

QUINN CREEK NEAR CASTLEDALE - STATION NO. 08NA028

ANNUAL EXTREMES OF DISCHARGE AND ANNUAL TOTAL DISCHARGE FOR THE PERIOD OF RECORD

YEAR	MAXIMUM INSTANTANEOUS DISCHARGE (m^3/s)	MAXIMUM DAILY DISCHARGE (m^3/s)	MINIMUM DAILY DISCHARGE (m^3/s)	TOTAL DISCHARGE (dam^3)	YEAR
1930	---	0.210 ON MAY 31 *	---	---	1930
1931	---	0.139 ON JUN 18	---	---	1931
		* - EXTREME RECORDED FOR THE PERIOD OF RECORD		---	MEAN

QUINSAM RIVER NEAR CAMPBELL RIVER - STATION NO. 08HD005

MONTHLY AND ANNUAL MEAN DISCHARGES IN CUBIC METRES PER SECOND FOR THE PERIOD OF RECORD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	YEAR
1956	---	---	---	---	---	---	---	1.63	1.33	9.83	12.8	17.8	---	1956
1957	7.54	6.40	15.2	11.9	6.31	2.82	2.85	2.95	2.76	2.49	4.34	14.5	6.78	1957
1958	21.1	23.1	8.77	8.65	5.41	3.17	1.89	1.64	2.04	8.92	7.07	21.6	9.38	1958
1959	20.9	7.96	10.6	7.72	9.51	6.99	3.85	1.73	2.37	4.62	8.91	14.5	8.33	1959
1960	8.82	18.1	5.71	9.79	7.09	6.91	2.58	1.83	1.82	5.32	9.73	16.6	7.82	1960
1961	30.3	27.8	24.3	12.5	12.3	5.96	3.23	2.04	2.39	3.45	7.03	10.3	11.6	1961
1962	13.7	16.8	7.64	8.53	4.32	4.07	2.62	1.80	3.05	11.1	21.0	32.5	10.4	1962
1963	12.3	19.2	11.5	9.54	6.99	2.73	3.16	3.35	3.00	13.9	19.9	19.7	10.4	1963
1964	18.0	14.3	8.33	5.22	4.16	8.08	4.54	3.16	3.07	4.29	5.97	8.55	7.29	1964
1965	8.39	15.5	8.08	6.98	4.28	2.87	2.37	2.19	2.11	7.58	14.6	22.1	8.04	1965
1966	16.5	12.4	14.4	7.52	5.10	4.11	2.87	2.33	3.08	6.47	15.8	36.2	10.6	1966
1967	19.5	11.5	16.0	7.19	4.90	4.35	1.88	1.74	2.80	8.82	9.11	21.7	9.11	1967
1968	40.5	12.4	13.5	4.91	5.46	3.36	2.49	2.27	3.99	16.8	25.2	55.1	13.5	1968
1969	5.78	12.3	13.9	14.9	7.38	3.69	2.27	2.20	4.18	5.00	15.4	23.0	9.14	1969
1970	8.66	9.52	6.43	5.07	4.29	2.89	1.60	1.88	3.22	3.36	5.09	20.6	6.04	1970
1971	18.7	19.8	11.6	13.0	8.83	5.40	2.37	2.50	3.84	5.80	19.9	6.48	9.77	1971
1972	5.01	12.1	36.4	17.4	8.49	6.82	3.16	2.66	4.42	2.81	9.10	16.0	10.3	1972
1973	22.4	5.92	9.74	4.20	4.35	4.91	1.55	1.18	2.46	5.34	9.20	31.0	8.43	1973
1974	17.3	15.1	18.4	11.2	7.27	7.90	4.82	2.34	3.30	3.89	9.22	15.3	9.64	1974
1975	8.57	6.24	12.7	11.1	10.7	5.17	3.00	2.46	4.51	8.65	42.6	13.0	10.7	1975
1976	12.6	9.20	7.17	8.61	5.58	4.68	2.46	2.09	3.59	3.75	5.47	8.67	5.97	1976
1977	8.05	11.2	10.5	4.67	4.19	3.30	2.03	1.73	3.69	7.11	16.7	16.5	7.58	1977
1978	8.92	11.4	12.3	9.89	5.30	2.88	1.47	2.19	5.16	4.61	8.44	8.13	6.78	1978
1979	4.32	19.1	11.8	7.69	6.22	2.20	1.82	1.68	4.77	8.09	5.83	19.1	7.65	1979
1980	7.80	10.6	11.4	8.12	4.38	4.17	4.49	1.89	3.76	4.61	12.2	29.9	8.61	1980
1981	12.7	11.0	5.43	5.74	6.69	4.82	2.74	2.14	3.75	6.52	11.8	12.8	7.15	1981
1982	7.66	12.9	12.4	6.67	5.27	4.03	2.04	1.95	3.26	13.1	7.38	15.9	7.69	1982
1983	19.2	22.5	16.5	6.38	4.45	2.99	2.15	2.11	3.64	4.57	22.6	6.09	9.42	1983
1984	12.3	11.3	8.56	6.32	6.59	3.78	1.92	1.93	3.47	8.02	14.2	8.51	7.22	1984
1985	4.63	7.02	7.62	8.27	4.68	2.50	1.54	1.55	2.79	4.32	4.87	5.35	4.58	1985
1986	22.1	11.1	10.2	5.94	7.24	3.86	2.49	2.54	3.38	2.95	7.46	18.8	8.15	1986
1987	22.5	14.4	14.3	4.71	4.62	3.62	2.08	1.96	3.28	2.93	3.92	16.5	7.61	1987
1988	11.6	9.56	7.30	6.61	4.62	3.69	2.46	2.28	3.47	3.40	18.2	11.8	7.04	1988
1989	9.06	9.23	10.3	8.47	3.90	2.83	2.60	2.51	3.29	4.44	9.34	13.3	6.59	1989
1990	13.7	10.3	7.66	5.29	3.58	5.86	2.31	1.61	2.47	6.77	32.4	20.3	9.33	1990
MEAN	14.2	13.1	11.9	8.14	6.07	4.23	2.58	2.20	3.25	6.36	12.9	17.1	8.49	MEAN

LOCATION - LAT 50 01 45 N LONG 125 17 55 W DRAINAGE AREA, 280 km^2 REGULATED

QUINSAM RIVER NEAR CAMPBELL RIVER - STATION NO. 08HD005

ANNUAL EXTREMES OF DISCHARGE AND ANNUAL TOTAL DISCHARGE FOR THE PERIOD OF RECORD

YEAR	MAXIMUM INSTANTANEOUS DISCHARGE (m^3/s)	MAXIMUM DAILY DISCHARGE (m^3/s)	MINIMUM DAILY DISCHARGE (m^3/s)	TOTAL DISCHARGE (dam^3)	YEAR
1956	---	---	0.889 ON SEP 21 *	---	1956
1957	---	30.3 ON DEC 26	1.50 ON OCT 19	214 000	1957
1958	---	64.6 ON DEC 02	1.47 ON AUG 17	296 000	1958
1959	---	43.6 ON JAN 12	1.64 ON AUG 14	263 000	1959
1960	---	57.2 ON DEC 14	1.64 ON SEP 16	247 000	1960
1961	---	110 E ON JAN 12	1.90 ON AUG 01	364 000	1961
1962	---	67.4 ON DEC 06	1.17 ON AUG 01	327 000	1962
1963	---	71.9 ON DEC 24	1.30 ON JUN 29	326 000	1963
1964	---	30.6 ON JAN 04	2.04 ON AUG 24	230 000	1964
1965	---	54.4 ON DEC 04	1.97 ON AUG 02	254 000	1965
1966	---	74.6 ON DEC 04	2.04 ON AUG 25	335 000	1966
1967	---	38.2 ON DEC 07	1.50 ON JUL 16	287 000	1967
1968	---	218 E ON JAN 19 *	1.93 ON AUG 04	426 000	1968
1969	---	61.7 ON DEC 11	1.56 ON AUG 01	288 000	1969
1970	---	44.2 ON DEC 14	1.22 ON FEB 28	191 000	1970
1971	---	96.3 ON NOV 10	1.85 ON AUG 11	308 000	1971
1972	---	79.9 ON MAR 16	1.44 ON AUG 01	325 000	1972
1973	---	91.7 ON JAN 16	0.963 ON AUG 10	266 000	1973
1974	---	65.4E ON JAN 16	1.74 ON AUG 19	304 000	1974
1975	---	144 ON NOV 14	1.19 ON AUG 01	338 000	1975
1976	---	26.3 ON JAN 31	1.73 ON AUG 10	169 000	1976
1977	---	63.1 ON DEC 03	1.18 ON AUG 22	230 000	1977
1978	---	30.6 ON NOV 08	1.23 ON JUL 27	214 000	1978
1979	---	70.5 ON DEC 19	1.05 ON JUL 01	241 000	1979
1980	---	76.5 ON DEC 12	1.51 ON AUG 12	272 000	1980
1981	40.6 ON JAN 22	38.5E ON JAN 26	1.82 ON AUG 21	225 000	1981
1982	61.4 AT 21:30 PST ON OCT 25	56.0 ON OCT 26	1.69 ON JUL 28	243 000	1982
1983	102 AT 05:07 PST ON FEB 12	91.3A ON FEB 12	1.81 ON AUG 25	297 000	1983
1984	34.8 AT 14:08 PST ON JAN 05	34.5 ON JAN 05	1.50 ON JUL 20	228 000	1984
1985	17.7 AT 13:39 PST ON APR 03	17.2 ON APR 03	1.31 ON AUG 23	144 000	1985
1986	---	59.3 ON JAN 19	2.20 ON AUG 18	257 000	1986
1987	62.0E AT 14:44 PST ON MAR 06	60.1 ON MAR 06	1.71 E ON JUL 05	246 000	1987
1988	43.3 AT 01:59 PST ON JAN 16	38.7 ON JAN 16	2.16 ON AUG 04	223 000	1988
1989	47.6 AT 00:21 PST ON DEC 06	45.5 ON DEC 05	2.30 ON AUG 10	208 000	1989
1990	106 AT 05:00 PST ON NOV 24 *	95.6 ON NOV 24	1.45 ON AUG 25	294 000	1990
				268 000	MEAN

A - MANUAL GAUGE (SEE REFERENCE INDEX)
E - ESTIMATED
* - EXTREME RECORDED FOR THE PERIOD OF RECORD

RABBIT RIVER NEAR THE MOUTH - STATION NO. 10BE012

MONTHLY AND ANNUAL MEAN DISCHARGES IN CUBIC METRES PER SECOND FOR THE PERIOD OF RECORD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	YEAR
1983	3.73	3.73	4.72	---	---	---	---	38.8	35.8	30.1	16.4	8.59	---	1983
1984	6.39	6.25	7.17	10.1	27.4	145	118	105	53.6	28.4	15.8	10.9	44.6	1984
1985	8.66	7.72	6.73	6.85	45.1	96.6	135	69.8	139	66.3	31.3	21.9	53.2	1985
1986	11.8	9.74	8.04	8.17	19.4	90.7	173	69.1	33.6	64.1	24.7	14.4	44.9	1986
1987	15.9	11.8	10.1	10.5	91.3	127	106	69.9	43.5	29.6	19.6	12.7	46.5	1987
1988	10.3	9.23	8.41	11.0	59.1	118	148	90.1	58.4	44.6	22.4	14.7	49.6	1988
1989	10.4	9.59	9.54	20.0	67.6	80.9	52.5	45.6	30.7	25.7	14.0	10.5	31.5	1989
1990	7.90	6.88	7.27	9.06	57.3	107	57.3	29.5	25.4	17.6	8.36	5.79	28.4	1990
MEAN	9.26	8.12	7.75	10.8	52.5	109	113	64.7	52.5	39.5	19.4	12.9	42.7	MEAN

LOCATION - LAT 59 36 34 N, LONG 127 05 46 W
DRAINAGE AREA, 3 780 km^2
NATURAL FLOW

RABBIT RIVER NEAR THE MOUTH - STATION NO. 10BE012

ANNUAL EXTREMES OF DISCHARGE AND ANNUAL TOTAL DISCHARGE FOR THE PERIOD OF RECORD

YEAR	MAXIMUM INSTANTANEOUS DISCHARGE (m^3/s)	MAXIMUM DAILY DISCHARGE (m^3/s)	MINIMUM DAILY DISCHARGE (m^3/s)	TOTAL DISCHARGE (dam^3)	YEAR
1983	---	---	3.13B ON JAN 24 *	---	1983
1984	384 AT 12:40 PST ON JUN 25	353 ON JUN 25	5.35B ON JAN 24	1 410 000	1984
1985	361 AT 10:57 PST ON JUL 07	308 ON JUL 07	6.27B ON MAR 29	1 680 000	1985
1986	---	305E ON JUL 03	7.30B ON APR 03	1 410 000	1986
1987	208 AT 10:14 PST ON JUN 22	194 ON JUL 03	9.66B ON APR 02	1 470 000	1987
1988	403 AT 02:45 PST ON JUL 14 *	301 ON JUL 14 *	8.00B ON APR 04	1 570 000	1988
1989	112 AT 10:09 PST ON JUN 05	105 ON JUN 05	8.70B ON DEC 23	994 000	1989
1990	217 AT 03:10 PST ON JUN 01	203 ON JUN 01	4.90B ON DEC 01	895 000	1990
				1 350 000	MEAN

B - ICE CONDITIONS
E - ESTIMATED
* - EXTREME RECORDED FOR THE PERIOD OF RECORD

RACING RIVER NEAR FORT NELSON - STATION NO. 10BE002

MONTHLY AND ANNUAL MEAN DISCHARGES IN CUBIC METRES PER SECOND FOR THE PERIOD OF RECORD

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	YEAR
1944	---	---	---	---	---	---	---	86.4	44.7	---	---	5.12	---	1944
1945	6.38	4.15	4.14	3.05	8.60	53.2	81.3	74.7	---	---	---	---	---	1945
1947	---	---	---	---	---	92.5	84.7	73.6	---	---	---	---	---	1947
MEAN	6.38	4.15	4.14	3.05	8.60	72.8	83.0	78.2	44.7	---	---	5.12	---	MEAN

LOCATION - LAT 58 49 26 N, LONG 125 08 08 W
DRAINAGE AREA, 1 900 km^2
NATURAL FLOW

ATTACHMENT 5

1996/JUN/19 08:51

Operator Id SPINTO

WELL4600 Production

MINISTRY OF ENVIRONMENT, LANDS & PARKS

Water Rights Information System

Summary Report (with legal descriptions and old coordinates)

BCGS Map Area	Well No.	Well Tag No.	Lot No.	Plan No.	Blk No.	TP	SC	RG	D.L.	Z	X	Y	Old Well No.	L.D.	Site Address	Date Constructed (dmy)	Well Depth (ft.)	Well Diam. (in.)	Drill Contr No.	Const. Method	Well Yield	Yld. Unt.	Depth to Water (ft.)	Depth to Bedrk (ft.)	Aquif Litho	Screen Interval (ft.)	G.W. Rpt	Chem Lab	Chem Fld	Chem Site No.
092K.004.1.1.2	001	0000000039950					85			00	00	00	000	49	GOLD RIVER HIGHWAY N	26-06-1978	55.0	10.0	032	DRI			7	UNK	UNC	39-55				
092K.004.1.1.4	001	0000000028358								00	00	00	000	49	301 ST ANNES RD	01-07-1973	30.0	0.0	101	UNK			UNK	UNK	UNC					
092K.004.2.4.2	001	0000000048280	1	36982					134	00	36	04	010	49	NOBLE RD	15-06-1981	145.0	6.0	078	DRI	4.0	GPM	82	UNK	UNC	142-145				
092K.004.2.4.2	002	0000000492G7	1	36982					134	00	36	04	011	49	NOBLE RD	29-09-1981	157.0	6.0	078	DRI	5.0	GPM	81	UNK	UNC	152-157				
092K.004.2.4.2	003	0000000038486	3	31528					134	00	36	04	C14	49	GREEN RD	01-11-1977	108.0	0.0	135	DRI	6.0	GPM	UNK	UNK	UNC					
092K.004.2.4.2	004	0000000050553	3	29948					134	00	36	04	C15	49		29-06-1982	138.0	6.0	078	DRI	4.0	GPM	115	UNK	UNC					
092K.004.2.4.2	005	0000000038480	1	31528					134	00	36	04	C16	49	NOBLE RD	01-11-1977	113.0	0.0	135	DRI	6.0	GPM	UNK	UNK	UNC					
092K.004.2.4.2	006	0000000053314								00	36	04	C17	49		16-02-1984	124.0	6.0	099	DRI	20.0	GPM	96	UNK	UNC	120-124				
092K.004.2.4.4	001	0000000004292							134	00	36	04	001	49		01-01-1950	12.0	0.0	UNK	DUG			3	UNK	UNC					
092K.004.2.4.4	002	0000000004306							134	00	36	04	002	49		01-01-1950	9.0	0.0	UNK	DUG			7	UNK	UNC					
092K.004.2.4.4	003	0300000006199							8	00	36	04	003	49		01-01-1950	0.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.004.2.4.4	004	0000000004411							8	00	36	04	004	49		01-01-1950	12.0	0.0	UNK	DUG			0	UNK	UNC					
092K.004.2.4.4	005	0000000022031							134	00	36	04	005	49		24-09-1969	330.0	6.0	135	DRI	1.0	GPM	UNK	10	BED					
092K.004.2.4.4	006	0000000022033	27						134	00	36	04	006	49	NOBLE SUBDIVISION	26-09-1969	430.0	6.0	135	DRI	2.0	GPM	UNK	6	BED					
092K.004.2.4.4	007	0000000004419								00	36	04	007	49		01-01-1950	45.0	0.0	UNK	UNK			UNK	42	UNC					
092K.004.2.4.4	008	0000000022517							134	00	36	04	008	49		01-07-1969	33.0	10.0	135	DRI	2.0	GPM	4	UNK	UNC					
092K.004.2.4.4	009	0000000022814								00	36	04	009	49	NOBLE SUBDIVISION	18-09-1969	330.0	0.0	135	DRI	9.5	GPM	UNK	UNK	UNC			Y		1401744
092K.004.2.4.4	010	0000000041365	20						8	00	36	04	012	49	FERRY WHARF	01-01-1979	90.0	6.0	078	DRI	20.0	GPM	1	0	BED					
092K.004.2.4.4	011	0000000038485	4	31528					134	00	36	04	C13	49	GREEN RD	01-11-1977	92.0	0.0	135	DRI	6.0	GPM	UNK	UNK	UNC					
092K.004.2.4.4	012	0000000038479	A	25491					134	00	36	04	018	49		01-11-1977	400.0	0.0	135	DRI	1.0	GPM	UNK	275	BED					
092K.004.2.4.4	013	0000000055499	25	2122					8	00	36	04	C19	49	HARPER & PLAZA ROADS	03-01-1986	84.0	6.0	039	DRI	50.0	GPM	UNK	UNK	UNC	80-84				
092K.004.2.4.4	014	0000000056420	3	36531					8	00	36	04	C20	49	PLAZA RD	29-08-1986	82.0	6.0	014	DRI	2.0	GPM	45	UNK	UNC	77-82				
092K.004.2.4.4	015	0000000004234							8	SC	36	05	002	49		01-01-1950	15.0	0.0	UNK	DUG			14	UNK	UNC					
092K.004.2.4.4	016	0000000004331							8	00	36	05	003	49		01-01-1950	0.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.004.2.4.4	017	0000000004384							8	00	36	05	004	49		01-01-1950	12.0	0.0	UNK	DUG			10	UNK	UNC					
092K.004.2.4.4	018	0000000004309							206	00	36	05	005	49	BEHIND SCHOOL	01-01-1950	35.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.004.2.4.4	019	0000000004424							8	00	36	05	006	49		01-01-1950	15.0	0.0	UNK	DUG			8	UNK	UNC					
092K.004.2.4.4	020	0000000004340							8	00	36	05	007	49		01-01-1950	7.0	0.0	UNK	DUG			0	UNK	UNC					
092K.004.2.4.4	021	0000000006196							8	00	36	05	008	49		01-01-1950	0.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.004.2.4.4	022	0000000023572	5	16216					6	00	36	05	009	49		20-06-1968	69.0	6.0	108	DRI	12.0	GPM	33	UNK	UNC	59-64				
092K.004.2.4.4	023	0000000020766	6	7656					8	00	36	05	C10	49		04-07-1967	114.0	6.0	108	DRI	2.0	GPM	UNK	UNK	UNC	111-114				
092K.004.2.4.4	024	0000000021997	13	7278					180	00	36	05	C12	49		03-12-1968	97.0	6.0	108	DRI	1.0	GPM	56	UNK	UNC	91-95				
092K.004.2.4.4	025	0000000021637							206	00	36	05	C14	49		16-07-1968	243.0	0.0	108	DRI			UNK	UNK	UNC					
092K.004.2.4.4	026	0000000021308	2	7275					180	00	36	05	C15	49		11-02-1968	245.0	0.0	076	DRI	5.0	GPM	UNK	10	BED					
092K.004.2.4.4	027	0000000044094	A	13877					8	00	36	05	C19	49		01-01-1980	61.0	6.0	014	UNK	9.0	GPM	5	UNK	UNC	36-47		Y		
092K.004.2.4.4	028	0000000048069	2	7275					180	00	36	05	C20	49	FIDDICK RD	29-05-1981	450.0	6.0	078	DRI	2.0	GPM	UNK	31	BED					
092K.004.2.4.4	029	0000000029927	A	25335					8	00	36	05	C21	49		07-03-1974	136.0	0.0	101	UNK	0.5	GPM	66	121	UNC					
092K.004.2.4.4	030	0000000049983	5	3162					8	00	36	05	C22	49	QUATHLASKI COVE	07-05-1980	220.0	5.0	069	DRI	30.0	GPM	UNK	UNK	UNC	200-220				
092K.004.2.4.4	031	0000000050486	1	5126					8	00	36	05	C23	49		21-04-1982	135.0	6.5	014	DRI	15.0	GPM	10	UNK	UNC	122-135				
092K.004.2.4.4	032	0000000042217	6	3162					8	00	36	05	C24	49		01-05-1979	189.0	0.0	078	UNK	12.0	GPM	44	UNK	UNC	184-189		Y		1401479
092K.004.3.2.4	001	0000000020648							176	00	31	06	001	49		15-05-1967	350.0	0.0	108	DRI				331						
092K.004.3.4.1	001	0000000019984								00	00	00	000	49		01-06-1966	205.0	6.0	108	DRI			UNK	UNK	UNC	193-196				
092K.004.3.4.1	002	0000000020134								00	00	00	000	49	SNOWDEN CREEK RD	01-09-1966	316.0	4.0	108	DRI	5.0	GPM	134	UNK	UNC	301-316				
092K.004.3.4.2	001	0000000048367	1	36418					130	00	00	00	009	49	DUNCAN BAY RD	11-08-1978	260.0	6.0	078	UNK	40.0	GPM	128	UNK	UNC	248-258				
092K.004.4.4.1	001	0000000042462							213	00	35	07	021	49		01-01-1950	4.0	0.0	UNK	DUG			0	UNK	UNC					
092K.004.4.4.1	002	0000000039322	1	22970					212	00	35	07	022	49		01-03-1978	247.0	0.0	135	DRI	3.0	GPM	UNK	UNK	BED					
092K.004.4.4.1	003	0000000033341	B						213	00	35	07	023	49		01-09-1975	230.0	6.5	076	DRI	60.0	GPM	30	29	BED					
092K.004.4.4.1	004	0000000004371							216	00	35	08	001	49		01-01-1950	18.0	0.0	UNK	DUG			10	UNK	UNC					
092K.004.4.4.2	001	0000000042458							213	00	36	07	021	49		01-01-1950	15.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.004.4.4.2	002	0000000004319							212	00	36	07	022	49		02-01-1950	12.0	0.0	UNK	DUG			8	UNK	UNC					
092K.004.4.4.2	003	0000000004376							212	00	36	07	023	49		01-01-1950	14.0	0.0	UNK	DUG			4	UNK	UNC					
092K.004.4.4.2	004	0000000004233							9	00	36	07	004	49		01-01-1950	6.0	0.0	UNK	UNK			0	UNK	UNC					
092K.004.4.4.2	005	0000000021327	1	18510					212	00	36	07	007	49	3281 VAUGHN RD	24-02-1988	175.0	0.0	076	DRI	1.0	GPM	UNK	33	BED					
092K.004.4.4.2	006	0000000026035	1	19774					212	00	36	07	008	49	MAIN RD	09-03-1972	46.0	6.0	014	DRI	20.0	GPM	20	UNK	UNC	38-46				
092K.004.4.4.2	007	0000000021347	6	24492					212	00	36	07	C09	49		05-03-1988	175.0	0.0	076	UNK	1.5	GPM	UNK	4	BED					
092K.004.4.4.2	008	0000000045968	2	31579					5	00	36	07	C10	49		01-09-1980	102.0	6.0	078	DRI	4.0	GPM	75	UNK	UNC					
092K.004.4.4.2	009	0000000050047	B	38780					212	00	36	07	C11	49	GOWLLAND HARBOUR RD	20-03-1982	550.0	6.0	078	DRI	2.0	GPM	56	9	BED					
092K.004.4.4.2	010	0000000041361							212	00	36	07	C12	49	GOWLLAND HARBOUR RD	01-01-1979	350.0	6.0	078	DRI	7.0	GPM	42	59	BED					

092K.004.4.4.2	011	000000041183	9	15208	212	00	36	07	013	49	GOWLAND HARBOUR RD	01-01-1979	210.0	6.0	078	DRI	7.0	GPM	55	34	BED							
092K.004.4.4.2	012	000000040267	B	25421	5	00	36	07	014	49	GOWLAND HARBOUR RD	01-08-1978	118.0	6.0	078	DRI	20.0	GPM	37	UNK	UNC							
092K.004.4.4.2	013	000000035548	8	20196	5	00	36	07	015	49		01-09-1976	149.0	6.0	078	DRI	5.0	GPM	63	UNK	UNC							
092K.004.4.4.2	014	000000038483	1	19774	212	00	36	07	016	49		01-11-1977	242.0	0.0	135	DRI			UNK	UNK	BED							
092K.004.4.4.2	015	000000055770			14	00	36	07	017	49		12-02-1986	300.0	6.0	039	DRI	3.0	GPM	70	30	BED							
092K.004.4.4.2	016	000000056307	1	20196	5	00	36	07	018	49	DAMMAY RD	30-07-1986	65.0	6.0	039	DRI	5.0	GPM	40	UNK	UNC							60-65
092K.004.4.4.3	001	000000004312			213	00	35	08	002	49		01-01-1950	9.0	0.0	UNK	DUG			7	UNK	UNC							
092K.004.4.4.3	002	000000056566	A	20490	215	00	34	08	001	49	GOWLAND HARBOUR RD	25-09-1986	300.0	6.0	039	DRI	1.5	GPM	20	0	BED							
092K.004.4.4.4	001	000000004435			24	00	36	08	001	49		01-01-1950	0.0	0.0	UNK	DUG			UNK	UNK	UNC							

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1996/JUN/19 08:51

MINISTRY OF ENVIRONMENT, LANDS & PARKS
Water Rights Information System
Summary Report (with legal descriptions and old coordinates)

Operator Id SPINTO

WELL4600 Production

BCGS Map Area	Well No.	Well Tag No.	Lot No.	Plan No.	Blk No.	TP	SC	RG	D.L.	X	X	Y	Old Well No.	L.D.	Site Address	Date Constructed (dmy)	Well Depth (ft.)	Well Diam. (in.)	Drill Contr No.	Const. Method	Well Yield	Yld. Unt.	Depth to Water (ft.)	Depth to Bedrk (ft.)	Aquif Litho	Screen Interval (ft.)	G.W. Rpt	Chem Lab	Chem Fld	Chem Site No.
092K.004.4.4.4	002	0000000004432							216	00	36	09	002	49		01-01-1950	4.0	0.0	UNK	DUG			0	UNK	UNC					
092K.004.4.4.4	003	0000000004433							216	00	36	09	003	49		01-01-1950	6.0	0.0	UNK	DUG			4	UNK	UNC					
092K.004.4.4.4	004	0000000004395							216	00	36	08	004	49		01-01-1950	4.0	0.0	UNK	DUG			2	UNK	UNC					
092K.004.4.4.4	005	0000000004404							216	00	36	08	005	49		01-01-1950	14.0	0.0	UNK	DUG			8	UNK	UNC					
092K.004.4.4.4	006	0000000004265							216	00	36	08	006	49		01-01-1950	13.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.004.4.4.4	007	0000000004301							216	00	36	08	007	49		01-01-1950	12.0	0.0	UNK	DUG			6	12	UNC					
092K.004.4.4.4	008	0000000004403							216	00	36	08	008	49		01-01-1950	6.0	0.0	UNK	DUG			3	UNK	UNC					
092K.004.4.4.4	009	0000000004211							216	00	36	08	009	49		01-01-1950	8.0	0.0	UNK	DUG			3	UNK	UNC					
092K.004.4.4.4	010	0000000004257							216	00	36	08	010	49		01-01-1950	14.0	0.0	UNK	DUG			9	UNK	UNC					
092K.004.4.4.4	011	0000000004386							216	00	36	08	011	49		01-01-1950	3.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.004.4.4.4	012	0000000004363							216	00	36	08	012	49		01-01-1950	4.0	0.0	UNK	DUG			2	UNK	UNC					
092K.004.4.4.4	013	0000000004388							216	00	36	08	013	49		01-01-1950	5.0	0.0	UNK	DUG			2	UNK	UNC					
092K.004.4.4.4	014	0000000004410							216	00	36	08	014	49		01-01-1950	4.0	0.0	UNK	DUG			0	UNK	UNC					
092K.004.4.4.4	015	0000000004252							216	00	36	08	015	49		01-01-1950	2.0	0.0	UNK	UNK			0	UNK	UNC					
092K.004.4.4.4	016	0000000023877	3	9356					24	00	36	08	020	49		18-08-1970	72.5	0.0	101	DRI	10.0	GPM	46	UNK	UNC					
092K.004.4.4.4	017	0000000042219	21	21863					24	00	36	08	021	49		01-05-1979	155.0	6.0	099	DRI	5.0	GPM	40	UNK	UNC					
092K.004.4.4.4	018	0000000046C26	15	1109					228	00	36	08	022	49		06-09-1980	250.0	6.0	072	DRI	1.0	GPM	UNK	16	RED					
092K.004.4.4.4	019	0000000046149	A	30584					24	00	36	08	023	49		22-09-1980	100.0	6.0	078	DRI	8.0	GPM	UNK	UNK	UNC					
092K.004.4.4.4	020	0000000050645	4	38540					34	00	36	08	026	49		14-07-1982	158.0	6.0	078	DRI	8.0	GPM	73	UNK	UNC					
092K.004.4.4.4	021	0000000050660	2	38540					24	00	36	08	027	49		14-07-1982	139.0	6.0	078	DRI	3.0	GPM	78	UNK	UNC					
092K.004.4.4.4	022	0000000049367	16	21863					24	00	36	08	028	49		15-10-1981	150.0	0.0	014	DRI	7.0	GPM	52	UNK	UNC	143-150				
092K.004.4.4.4	023	0000000040263	B	25412					216	00	36	08	029	49	GOWLLAND HARBOUR RD	01-08-1978	330.0	6.0	078	DRI			UNK	60	RED					
092K.004.4.4.4	024	0000000039984	28	1109					226	00	36	08	032	49		01-07-1978	195.0	0.0	135	DRI			172	4	RED					
092K.004.4.4.4	025	0000000056444	A	15996					226	00	36	08	034	49	CRAMEN RD	22-10-1986	108.0	6.0	039	DRI	4.0	GPM	85	UNK	UNC	104-108				
092K.004.4.4.4	026	0000000004277							24	00	37	08	002	49		01-01-1950	12.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.004.4.4.4	027	0000000020738	2	9050					24	00	37	08	005	49		26-06-1967	131.0	6.0	108	DRI	5.0	GPM	30	UNK	UNC	125-130				
092K.004.4.4.4	028	0000000048297	5	18885					7	00	37	08	018	49	ERIN HARBOR RD	17-06-1981	240.0	6.0	078	DRI			UNK	71	RED					
092K.004.4.4.4	029	0000000043965	14	21863					7	00	37	08	019	49	SCHOONER RD	01-08-1978	58.0	6.0	078	DRI	20.0	GPM	37	UNK	UNC					
092K.005.1.1.1	001	0000000000187								00	37	01	000	49	CAPE MUDGE LIGHTHOUS		24.0	0.0	UNK	DUG					RED					
092K.005.1.1.2	001	0000000004420							169	00	38	02	001	49		01-01-1950	0.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.005.1.1.2	002	0000000004421							169	00	38	02	002	49		01-01-1950	0.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.005.1.1.2	003	0000000039981	A						168	00	38	02	003	49		01-07-1978	281.5	6.0	069	DRI	20.0	GPM	261	UNK	UNC					
092K.005.1.1.2	004	0000000054846	A						167	00	38	02	004	49	JOYCE RD	05-04-1985	390.0	6.0	039	DRI	4.0	GPM	330	UNK	UNC	234-239				
092K.005.1.1.2	005	0000000004413							167	00	38	01	001	49		01-01-1950	0.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.005.1.1.3	001	0000000004412								00	37	03	001	49		01-01-1950	0.0	0.0	UNK	UNK			UNK	UNK	UNC					
092K.005.1.1.3	002	0000000021586	A	18368					678	00	37	03	003	49		27-04-1988	170.0	0.0	108	DRI			UNK	UNK	UNC					
092K.005.1.1.3	003	0000000053413								00	37	03	004	49		30-03-1984	264.0	6.0	099	DRI			UNK	UNK	UNC					
092K.005.1.1.3	004	0000000053412								00	37	03	005	49		30-03-1984	141.0	10.0	072	DRI	50.0	GPM	UNK	141	UNC					
092K.005.1.1.3	005	0000000053411								00	37	03	006	49		30-03-1984	130.0	6.0	099	DRI			UNK	130	RED					
092K.005.1.1.3	006	0000000013192							680	00	38	03	001	49		01-01-1950	5.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.005.1.1.3	007	0000000013197							126	00	38	03	002	49		01-01-1950	0.0	0.0	UNK	UNK			UNK	UNK	UNC					
092K.005.1.1.4	001	0000000037314	3	24519					188	00	38	03	003	49		01-06-1977	159.0	6.0	099	DRI	8.0	GPM	29	UNK	UNC	154-159				
092K.005.1.1.4	002	0000000044569	4	24519					188	00	38	03	004	49		14-03-1980	163.0	6.0	099	DRI	10.0	GPM	75	UNK	UNC	159-163				
092K.005.1.1.4	003	0000000037416	3	24519					188	00	38	03	005	49	SUTIL RD	14-06-1977	159.0	6.0	099	DRI	8.0	GPM	29	UNK	UNC	154-159				
092K.005.1.1.4	004	0000000006202							188	00	38	03	001	49		01-01-1950	0.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.005.1.1.4	005	0000000004369							188	00	39	03	002	49	CAPE MUDGE RD	C1-01-1950	77.0	6.0	108	DRI	20.0	GPM	12	UNK	UNC					
092K.005.1.1.4	006	0000000039598	3	31935					188	00	39	03	003	49		01-05-1978	50.0	0.0	135	DRI			UNK	UNK	UNC					
092K.005.1.1.4	007	0000000039597	3	31936					188	00	39	03	004	49		01-05-1978	146.0	0.0	135	DRI			UNK	UNK	UNC					
092K.005.1.1.4	008	0000000038807	A	32218					188	00	39	03	005	49		01-01-1978	104.0	0.0	135	DRI	4.0	GPM	UNK	UNK	UNC					
092K.005.1.1.4	009	0000000039323	3	31935					188	00	39	03	006	49		01-03-1978	184.0	0.0	135	DRI	1.0	GPM	UNK	UNK	UNC					
092K.005.1.1.4	010	0000000055427	3	31935					188	00	39	03	007	49	SUTIL ROAD	15-10-1985	140.0	6.0	032	DRI	15.0	GPM	45	UNK	UNC	136-140				
092K.005.1.1.4	011	0000000039220	2	24519					188	00	39	03	008	49	SUTIL ROAD	01-02-1978	107.0	0.0	135	DRI	20.0	GPM	UNK	UNK	UNC					
092K.005.1.1.4	012	0000000034792	12	24472					188	00	00	00	000	49	FRANCISCO ROAD	11-05-1976	84.0	0.0	101	DRI	5.0	GPM	45	UNK	UNC	79-84				
092K.005.1.3.1	001	0000000004270							678	00	37	03	002	49		01-01-1950	30.0	0.0	UNK	DUG			UNK	UNK	UNC					
092K.005.1.3.1	002	0000000056502	A	39818					191	00	37	04	003	49	MOELE RD	04-01-1985	310.0	6.0	039	DRI			UNK	UNK	UNC					
092K.005.1.3.3	001	0000000004255							124	00	37	04	001	49		01-01-1950	20.0	0.0	UNK	DUG			9	UNK	UNC					
092K.005.1.3.3	002	0000000034965	B	30532					190	00	37	04	002	49	CAPE MUDGE RD	02-06-1976	318.0	6.0	101	UNK	5.0	GPM	277	UNK	UNC	304-318				
092K.005.1.3.3	003	0000000004249							182	00	37	05	001	49		01-01-1950	20.0	0.0	UNK	DUG			UNK	UNK	UNC					

092K.005.1.3.3	004	000000041373	A	38625		182	00	37	05	002	49	SMITH RD	01-01-1979	233.0	6.0	078	DRI	6.0	GPM	210	UNK	UNC		
092K.005.1.3.3	005	000000054932				123A	00	37	05	003	49	MARIOT BAY RD	02-07-1985	196.0	6.0	032	DRI	10.0	GPM	153	UNK	UNC		193-198
092K.005.1.3.4	001	000000025970	23	23543		155	00	38	04	001	49	3463 SMITHS RD	18-02-1972	193.0	6.0	014	DRI			UNK	UNK	UNC		
092K.005.1.3.4	002	000000025257	4	19429		184	00	38	04	002	49	WAWAK BEACH	15-08-1971	31.0	0.0	101	DRI	1.5	GPM	14	UNK	UNC		27-31
092K.005.1.3.4	003	000000035305	1	24011		155	00	38	04	003	49	SMITH RD	20-07-1976	175.0	0.0	101	UNK	30.0	GPM	UNK	UNK	UNC		
092K.005.1.3.4	004	000000053493	3	23543		155	00	38	04	004	49	QUADRA LOOP	26-04-1984	180.0	6.0	039	UNK	5.0	GPM	100	UNK	UNC		175-180
092K.005.1.3.4	005	000000054516	1	29849		155	00	38	04	005	49	SMITH RD	17-01-1985	174.0	6.0	039	DRI	20.0	GPM	125	UNK	UNC		169-174
092K.005.1.3.4	006	000000054810	4	29849		184	00	38	04	006	49	QUADRA LOOP	30-05-1985	230.0	6.0	039	DRI	5.0	GPM	180	UNK	UNC		124-129
092K.005.1.3.4	007	000000025954	28	19429		155	00	38	05	001	49	660 ALPINE ST	10-02-1972	58.0	6.0	014	DRI	20.0	GPM	0	UNK	UNC		54-58

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Operator Id SPINTO

WELL4600 Production

MINISTRY OF ENVIRONMENT, LANDS & PARKS

Water Rights Information System

Summary Report (with legal descriptions and old coordinates)

BCGS Map Area	Well No.	Well Tag No.	Lot No.	Plan No.	Blk No.	TP	RC	RG	D.L.	X	Y	Old Well No.	L.D.	Site Address	Date Constructed (dmy)	Well Depth (ft.)	Well Diam. (in.)	Drill Contr No.	Const. Method	Well Yield	Yld. Unt.	Depth to Water (ft.)	Depth to Bedrk (ft.)	Aquif Litho	Screen Interval (ft.)	G.W. Rpt	Chem Lab	Chem Fld	Chem Site No
093K.005.1.3.4	008	0000000040739	4	24011					155	00 38 05	002	49		QUADRA LOOP	01-10-1978	40.0	6.0	043	DRI	10.0	GPM	UNK	UNK	UNC					
093K.005.1.3.4	009	0000000041385	4	23543					155	00 38 05	003	49		QUADRA LOOP	01-01-1979	198.0	0.0	078	DRI	10.0	GPM	168	UNK	UNC	193-198				
093K.005.1.3.4	010	0000000049793	23	24011					155	00 38 05	004	49		QUADRA LOOP	01-01-1982	237.0	6.0	078	DRI	2.0	GPM	154	UNK	UNC	232-237				
093K.005.1.3.4	011	0000000042221	8	24011					155	00 38 05	005	49		QUADRA LOOP	01-05-1979	71.0	0.0	069	DRI	12.0	GPM	UNK	UNK	UNC	65-65				
093K.005.1.3.4	012	0000000042994	8	24011					155	00 38 05	006	49		QUADRA LOOP	01-08-1979	160.0	5.0	069	DRI	10.0	GPM	UNK	UNK	UNC	129-139				
093K.005.1.3.4	013	0000000041388	27	24011					155	00 38 05	007	49		QUADRA LOOP	01-01-1979	178.0	6.0	078	DRI	7.0	GPM	134	UNK	UNC					
093K.005.1.3.4	014	0000000053474	18	24011					155	00 38 05	008	49		QUADRA LOOP	19-04-1984	180.0	6.0	039	UNK	8.0	GPM	100	UNK	UNC	175-180				
093K.005.1.3.4	015	0000000054938	5	24011					155	00 38 05	009	49		QUADRA LOOP	04-07-1985	147.0	0.0	032	DRI	8.0	GPM	131	UNK	UNC	143-147				
093K.005.1.3.4	016	0000000021675	1	19429					184	00 00 00	000	49			29-07-1968	50.0	6.0	108	DRI	5.0	GPM	5	UNK	UNC	46-50				
093K.005.1.3.4	017	0000000021677	21	19429					155	00 00 00	000	49			31-07-1968	76.0	6.0	108	DRI	15.0	GPM	10	UNK	UNC	71-76				
093K.005.3.3.1	001	0000000004296							201	00 37 07	001	49			01-01-1950	18.0	0.0	UNK	DUG			10	UNK	UNC					
093K.005.3.3.1	002	0000000004295							203	00 37 07	003	49			01-01-1953	17.0	0.0	UNK	DUG			UNK	UNK	UNC					
093K.005.3.3.1	003	0000000041390	2	22144					200	00 37 07	004	49		HERIOT BAY RD	01-01-1979	120.0	6.0	078	DRI	6.0	GPM	67	UNK	UNC	113-117				
093K.005.3.3.1	004	0000000035306	B	535731					201	00 37 07	005	49		HERIOT BAY & MILFORD	20-07-1976	138.0	0.0	101	DRI	5.0	GPM	UNK	UNK	UNC					
093K.005.3.3.1	005	0000000054063	1B	30864					201	00 37 07	006	49		MILFORD RD	11-06-1985	88.0	6.0	039	DRI	1.0	GPM	70	UNK	UNC	83-88				
093K.005.3.3.1	006	0000000055611	A	14600					201	00 37 07	006	49		MILFORD RD	20-12-1985	127.0	6.0	039	DRI	20.0	GPM	80	UNK	UNC	123-127				
093K.005.3.3.3	001	0000000004348							?	00 37 08	001	49			01-01-1950	12.0	0.0	UNK	DUG			8	12	UNC					
093K.005.3.3.3	002	0000000017053							33	00 37 08	003	49		REBECCA SPIT PARK	23-06-1961	65.0	0.0	046	DRI			UNK	UNK	UNC					
093K.005.3.3.3	003	0000000017067							33	00 37 08	004	49		REBECCA SPIT PARK	08-07-1961	80.0	0.0	046	DRI	5.0	GPM	19	UNK	UNC					
093K.005.3.3.3	004	0000000020856	B	30943					?	00 37 08	006	49		3220 DREW HARBOUR RD	16-08-1967	69.0	8.0	108	DRI	15.0	GPM	10	UNK	UNC	51-61				
093K.005.3.3.3	005	0000000020051							33	00 37 08	007	49		REBECCA SPIT	18-07-1966	86.0	8.0	130	DRI	35.0	GPM	16	UNK	UNC	81-86				
093K.005.3.3.3	006	0000000048160							?	00 37 08	008	49		BUKER RD	03-06-1981	410.0	6.0	078	DRI	3.0	GPM	220	71	BED					
093K.005.3.3.3	007	0000000044104	26	18885					?	00 37 08	009	49		BUKER RD	01-01-1980	300.0	0.0	078	UNK	3.0	GPM	176	9	BED					
093K.005.3.3.3	008	0000000049299	32	18885					?	00 37 08	010	49		LEASK RD	07-10-1981	59.0	6.0	078	DRI	1.0	GPM	20	59	UNC					
093K.005.3.3.3	009	0000000048242	11	18885					?	00 37 08	011	49		LEASK RD	11-06-1981	97.0	6.0	078	DRI	2.0	GPM	41	UNK	UNC	93-97				
093K.005.3.3.3	010	0000000049847	10	18885					?	00 37 08	012	49		WOOLEY RD	28-10-1981	151.0	6.0	078	DRI	3.0	GPM	47	148	UNC					
093K.005.3.3.3	011	0000000049496	31	18885					?	00 37 08	013	49		WOOLEY RD	04-11-1981	170.0	6.0	078	DRI			UNK	40	BED					
093K.005.3.3.3	012	0000000049497	31	18885					?	00 37 08	014	49		WOOLEY RD	04-11-1981	48.0	6.0	078	DRI	1.0	GPM	UNK	UNK	UNC					
093K.005.3.3.3	013	0000000049364	9	18885					?	00 37 08	015	49		WOOLEY RD	15-10-1981	290.0	6.0	078	DRI	0.5	GPM	51	92	BED					
093K.005.3.3.3	014	0000000049122	C	20943					?	00 37 08	016	49		DREW HARBOR DEV	18-09-1981	78.0	6.0	078	DRI	5.0	GPM	UNK	UNK	UNC	73-78				
093K.005.3.3.3	015	0000000049720	A	20943					?	00 37 08	017	49		HERIOT BAY RD	16-12-1981	125.0	5.0	078	DRI	3.5	GPM	58	UNK	UNC					
093K.005.3.3.3	016	0000000055607	30	18885					?	00 37 08	030	49		WOOLEY RD.	19-12-1985	65.0	6.0	039	DRI	5.0	GPM	56	UNK	UNC	62-65				

---------- END OF REPORT WELL4600 ----------

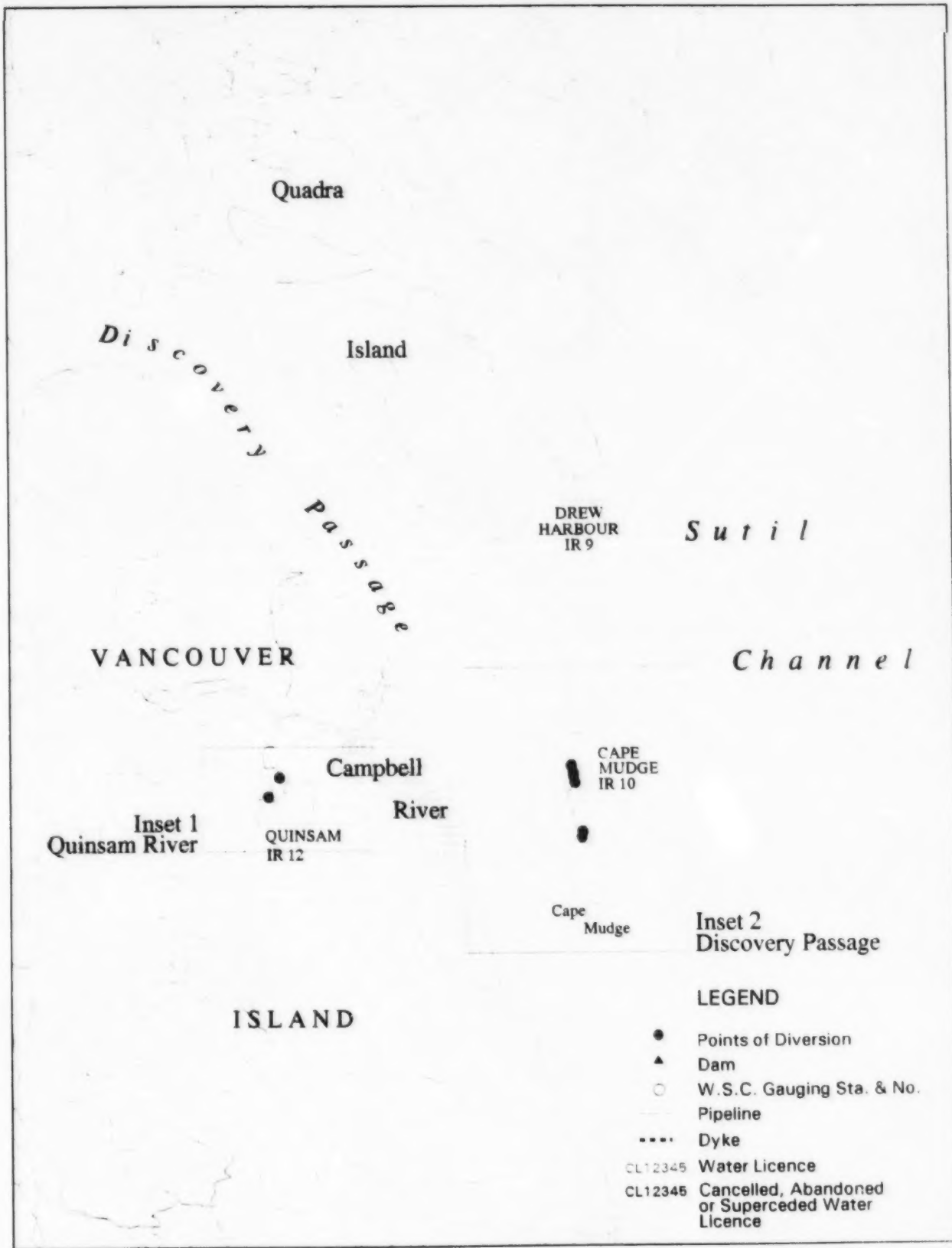
ATTACHMENT 6

A REF. NO.	B RESERVE NAME & NO.	C BAND NAME	D WATER BODY	E TYPE OF WORKS	F LENGTH DYKE (KM)	G LENGTH B.P. (KM)	H CROWN WDTH. (M)	I APPROX. WATER SLOPE	J PROT'D. AREA (HA)	K DATE LAST CONST'D.	L CONST. FUNDED BY	M INSP-ECTED BY	N MAINTAINED BY
1	ASHNOLA 10	LOWER SIMILKAMEEN	SIMILKAMEEN R.	DYKE & B.P	0.40	1.20	?	?	60	1988	ARDSA	I.of D.	BAND
2	AIKWUCKS 15	SQUAMISH	SQUAMISH R.	DYKE	0.80	N/A	3.6	2:1	19	1977	B.C./MUN.	I.of D.	SQUAMISH DIST.
3	BARNSTON ISLAND 3	KATZIE	FRASER R.	DYKE	0.67	N/A	3.0	2:1	48.5	1950	FYDB	I.of D.	BRSH. I.D. DIST.
4	BELLA COOLA 1	BELLA COOLA	THORSEN CR.	DYKE	0.82	0.00	4.0	2:1	?	1988	BAND	?	BAND
5	BELLA COOLA 1	BELLA COOLA	TASTSQUAN CR.	DYKE & B.P	0.15	0.10	?	?	?	1974	BAND	?	BAND
6	CAPE MUDGE	CAPE MUDGE	SEA	SEAWALL	N/A	?	N/A	?	?	?	?	?	BAND
7	CHAVATHIL	HOPE	FRASER R.	B.P.	N/A	0.50	N/A	?	?	?	CPR	?	CPR
8	CHEAM 1	CHEAM	FRASER R.	DYKE	0.82	0.76	3.0	2.5:1	55.8	1974	FRJP/CNR	I.OF D.	CHILLIWACK DIST.
9	CHEHALIS 5	CHEHALIS	CHEHALIS R.	DYKE	0.44	N/A	4.0	2:1	881	1990	BAND	?	BAND
10	COQUITLAM 2	COQUITLAM	COQUITLAM R.	DYKE	0.90	N/A	?	?	70	?	BAND	?	BAND
11	COWICHAN 1	COWICHAN	COWICHAN/KOKSILAH RS.	DYKE	5.74	N/A	3.0	2:1	650	1985	ARDSA	I.of D.	BAND
12	DEADMAN'S CREEK	SKEETCHESTN	DEADMAN CR.	B.P.	N/A	?	N/A	?	600	1948	BAND	?	BAND
13	EAST SAANICH 2	TSAWOUT	SEA	SEAWALL	N/A	0.40	N/A	1.5:1	?	1989	BAND	?	BAND
14	ENDERBY 2	ENDERBY	SHUSWAP R./FORTUNE CR.	DYKE	?	N/A	?	?	340	?	BAND	?	BAND
15	FORT RUPERT 1	KWAKIUTL	SEA	SEAWALL	N/A	0.09	N/A	1.5:1	340	1974	BAND	?	BAND
16	GITANMAAX 1	GITANMAAX	SKEENA R.	GROYNE	N/A	?	N/A	N/A	?	?	?	?	BAND
17	GORDON RIVER 2	PACHEENAHT	SAN JUAN R.	B.P.	N/A	0.50	N/A	2:1	?	1991*	BAND	?	BAND
18	HALFWAY 168	HALFWAY	HALFWAY R.	B.P.	N/A	0.10	N/A	?	?	1991*	BAND	?	BAND
19	KAMLOOPS	KAMLOOPS	SOUTH THOMPSON R.	DYKE	1.37	N/A	?	?	?	1972	B.C.-MYTS.	?	BAND
20	KATZIE 1	QWEEKANO	UNKNOWN	DYKE	?	N/A	?	?	?	1990	BAND	?	BAND
21	KATZIE 1	KATZIE	FRASER R.	DYKE	0.60	N/A	3.0	2.5:1	31.5	1984	FRJP	I.of D.	PITT M'DOWS DIST.
22	KINCOLITH 14	KINCOLITH	NASS R.	CAUSEWAY	N/A	0.20	4.0	1.5:1	?	1990	BAND	?	BAND
23	KITAMAAT 2	KITAMAAT	WATHL R.	DYKE	0.55	N/A	3.5	2:1	16	1988	BAND	?	BAND
24	KITWANGAR 1	GITWANGAK	SKEENA	B.P.	N/A	?	N/A	?	93	?	CNR	?	CNR
25	KITWILLUCKSILT 7	GITWINKSIHLKW	UNNAMED	CHAN. IMPS	N/A	N/A	N/A	N/A	52	1987	BAND	?	BAND
26	KULKAYU 4	HARTLEY BAY	SEA	SEAWALL	N/A	0.22	N/A	1.5:1	?	1977	BAND	?	BAND
27	LACHKALTSAP 9	LAKALZAP	GREENVILLE CR.	DYKE	1.40	N/A	4.0	1.5:1	800	1990	BND/BC	?	BAND
28	LAKAHAHMEN 11	LAKAHMEN	MICOMEN SLOUGH	DYKE	0.90	N/A	?	?	23	1949	FYDB	I.of D.	N.MICOMEN I.DIST.
29	LOUIS CREEK 4	NORTH THOMPSON	N.THOMPSON/LOUIS CR.	B.P.	N/A	?	N/A	?	0.6	1984	BAND	?	BAND
30	NASSET 1	NASSET	SEA	SEAWALL	N/A	0.22	N/A	VERT.	?	1983	BAND	?	BAND
31	NATSQUI MAIN 2	NATSQUI	FRASER R.	DYKE	1.10	N/A	3.0	2.5:1	41.3	1974	FRJP	I.of D.	DIST.OF MATSQUI
32	MCMILLAN ISLAND 16	LANGLEY	FRASER R.	B.P.	N/A	0.46	N/A	?	181	?	BAND	?	BAND
33	MOUNT CURRIE 1,6,8,10	MOUNT CURRIE	BIRKENHEAD	DYKE	0.70	N/A	3.0	2:1	442	PRE-70	?	I.of D.	PEMBERTON D.DIST.
34	MUSQUEAM 2	MUSQUEAM	SEA/M.ARM FRASER R.	DYKE & B.P	0.55	0.40	?	?	27.3	?	BAND	?	BAND
35	NANAIMO RIVER 3	NANAIMO RIVER	NANAIMO R./SEA	DYKE	2.20	N/A	?	?	92	1934	BAND	?	BAND
36	NEQUATQUE 1	ANDERSON LAKE	GATES R./ANDERSON L.	DYKE	?	N/A	?	?	9	1968	MYTS/BCR	?	?
37	NESUCH 3	MOUNT CURRIE	LILLOOET R.	DYKE	8.70	N/A	3.0	2.5:1	295	1987	B.C./D.D.	I.of D.	PEMBERTON D. DIST.
38	NORTH THOMPSON 1	NORTH THOMPSON	NORTH THOMPSON R.	B.P.	N/A	0.60	N/A	?	250	?	BAND	?	BAND
39	PAPERVATONIH 4	LAKAHAHMEN	FRASER R.	DYKE	0.88	N/A	3.6	2.5:1	16.4	1980	FRJP	I.of D.	MICOMEN IS.I.DIST.
40	PENTICTON	PENTICTON	OKANAGAN R/SHINGLE CR.	DYKE	?	N/A	?	?	930	1953	B.C./CAN.	I.of D.	PROVINCE
41	PENTLEDGE 2	CONOE	PUNTLEDGE R.	B.P.	N/A	0.26	N/A	1.5:1	?	1972	BAND	?	BAND
42	PETERS 1	PETERS	FRASER	DYKE	0.25	N/A	?	?	125	1988	BAND	?	BAND
43	PETERS 2	PETERS	FRASER R.	B.P.	N/A	1.07	N/A	2:1	40	1988	BAND	?	BAND
44	PINCHIE 2	TL'AZT'EN NATION	STUART L./PINCHI R.	B.P.	N/A	0.10	N/A	2.5:1	30	1988	BAND	?	BAND
45	PORT SIMPSON 1	LAX KW'ALAAMS	SEA	CAUSEWAY	N/A	0.13	?	1:1	?	1990	BAND	?	BAND
46	QUAAOUT 1	LITTLE SHUSWAP	LITTLE R./ SHUSWAP L.	B.P.	N/A	0.13	N/A	?	?	1975	BAND	?	BAND
47	RUBY CREEK 2	SKAWAHLOOK	RUBY CREEK	DYKE	?	N/A	?	?	1.2	?	BAND	?	BAND
48	SALMON RIVER 1	SPALLUMCHEEN	SALMON R.	B.P.	N/A	0.19	N/A	1.5:1	?	1984	BAND	?	BAND
49	SCOWLITZ 1	SCOWLITZ 1	FRASER R./HARRISON R.	DYKE	2.90	N/A	3.0	2.5:1	93	1972	FRJP	I.of D.	KENT DIST.
50	SEABIRD ISLAND	SEABIRD ISLAND	FRASER R.	B.P.	N/A	1.90	N/A	2:1	166	1976/82	FRJP/BAND	I.of D.	KENT DIST./BAND
51	SEALCHEM 18	SQUAMISH	SQUAMISH R.	DYKE	0.60	N/A	3.6	2.5:1	4	1987	B.C./MUN.	I.of D.	SQUAMISH DIST.
52	SECHELT 2	SECHELT	SEA	B.P.	N/A	0.85	N/A	1.5:1	?	1984	BAND	?	BAND
53	SEYMOUR CREEK 2	SQUAMISH	SEYMOUR CR.	B.P.	N/A	?	N/A	?	1	?	LESEE	?	?
54	SKAWALOOK 1	SKAWALOOK	FRASER R.	B.P.	N/A	0.12	N/A	?	?	?	?	?	BAND
55	SKWEAHM 10	LAKAHAHMEN	MICOMEN SLOUGH	DYKE	2.10	N/A	3.0	2:1	23	1949	FYDB	I.of D.	MICOMEN IS.I.DIST
56	SKEMEOSKUAMKIN 1,7,9	LOWER SIMILKAMEEN	SIMILKAMEEN R.	DYKE & B.P	7.50	1.50	3.0	2:1	1100	1986	ARDSA	I.of D.	BAND
57	SKIDEGATE 1	SKIDEGATE	SEA	B.P.	N/A	0.10	N/A	?	?	1985	BAND	?	BAND
58	SKUKALSPN 10	SKWAH	FRASER R.	DYKE	4.20	N/A	3.0	2.5:1	488	1949	FYDB	I.of D.	MICOMEN IS.I.DIST
59	SKWALI 3	SKWAH	FRASER R.	DYKE	2.50	N/A	3.0	2:1	4	1950	FYDB	I.of D.	CHILLIWACK DIST.
60	SKWAY 4,5	SKWAH	FRASER R.	DYKE	*	N/A	*	*	*	1950	FYDB	I.OF D.	?
61	SLOSH 1	SETON LAKE	SETON R./SETON L.	B.P.	N/A	0.06	N/A	1.5-2:1	?	1990	BAND	?	?
62	SOOWAHLIE 14	SOOWAHLIE	CHILLIWACK R.	DYKE	2.61	N/A	3.7	2:1	?	1990	BAND	?	BAND
63	SWIISEHALPH 8	ADAMS LAKE	SHUSWAP L./SYPHON CR.	DYKE	?	N/A	?	?	?	?	LESEE	?	?
64	TSAWWASSEN	TSAWWASSEN	SEA	DYKE	2.50	N/A	3.6	2.5:1	273	1985	FRJP	I.of D.	CORP. OF DELTA
65	TSEATAH 2	CHEAM	FRASER R.	DYKE & B.P	2.80	0.76	3.0	2:1	97	1973	FRJP/BAND	I.of D.	KENT DIST./BAND
66	TSULQUATE 4	QWA-SALA-NAKWAX	SEA/TSULQUATE R.	B.P.	N/A	0.28	N/A	?	?	1971	BAND	?	BAND
67	VAIVAUUK 14	SQUAMISH	SQUAMISH R.	DYKE	*	N/A	*	*	*	1977	B.C./MUN.	I.OF D.	SQUAMISH DIST.
68	WHISPERING PINES 4	WHISPERING PINES	NORTH THOMPSON R.	DYKE	?	N/A	?	?	?	PRE-72	PREV.OWNER	?	?
69	ZAITSCHULLACH 9	LAKAHAHMEN	MICOMEN SLOUGH	DYKE	0.70	N/A	3.0	2:1	20	1949	FYDB	I.of D.	MICOMEN IS.I.DIST
				TOTALS	57.65	13.17							

DYKE CATEGORIES: A - 1:200 yr. Flood + 0.6 X Freeboard
B - 1:200 yr. Flood, no Freeboard
C - Less than 1:200 yr. Flood or unknown

* -See Column Y COMMENTS

ATTACHMENT 7



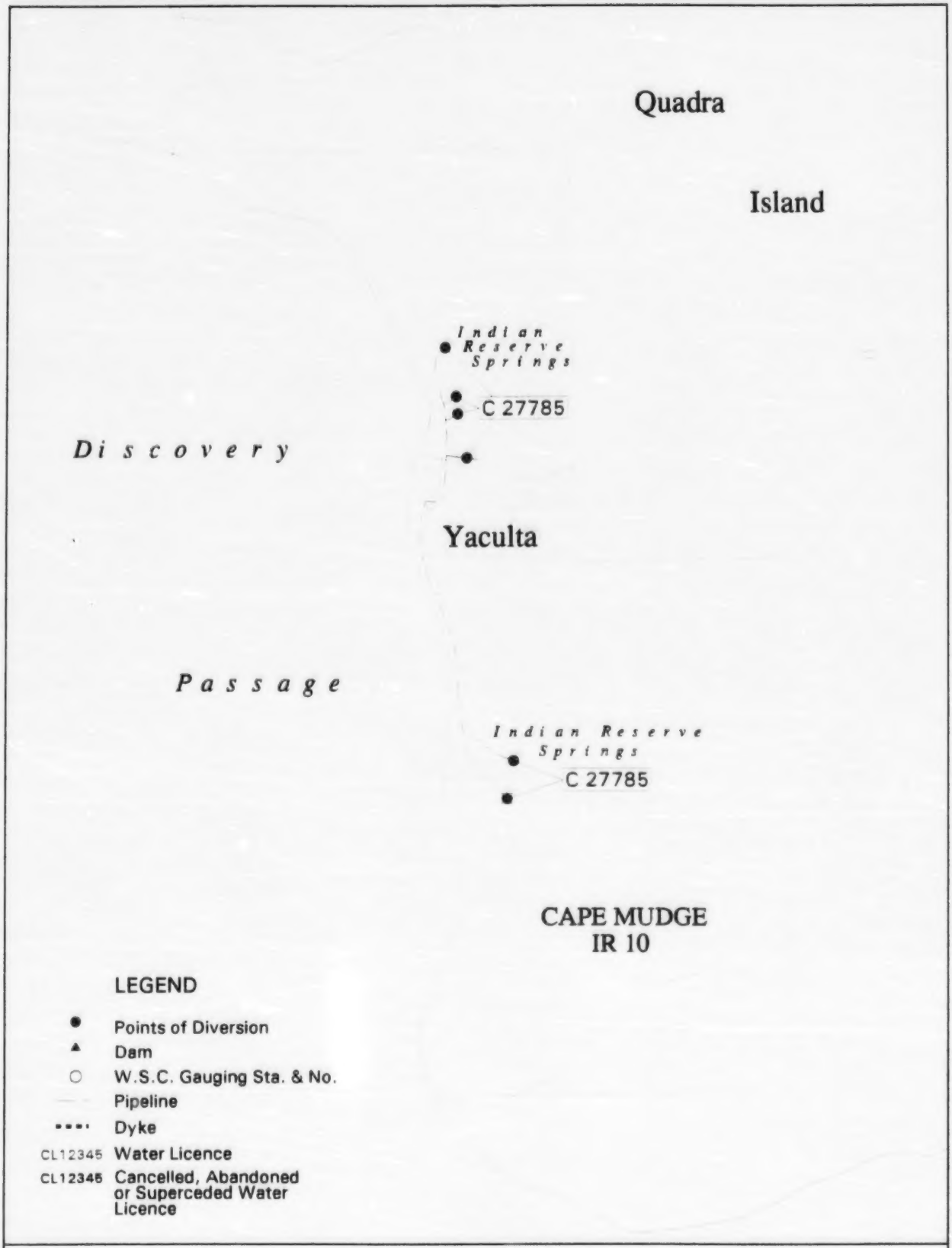
Cape Mudge

Scale 1:125,000

Ministry of Environment, Lands & Parks

Date: March 13, 2000

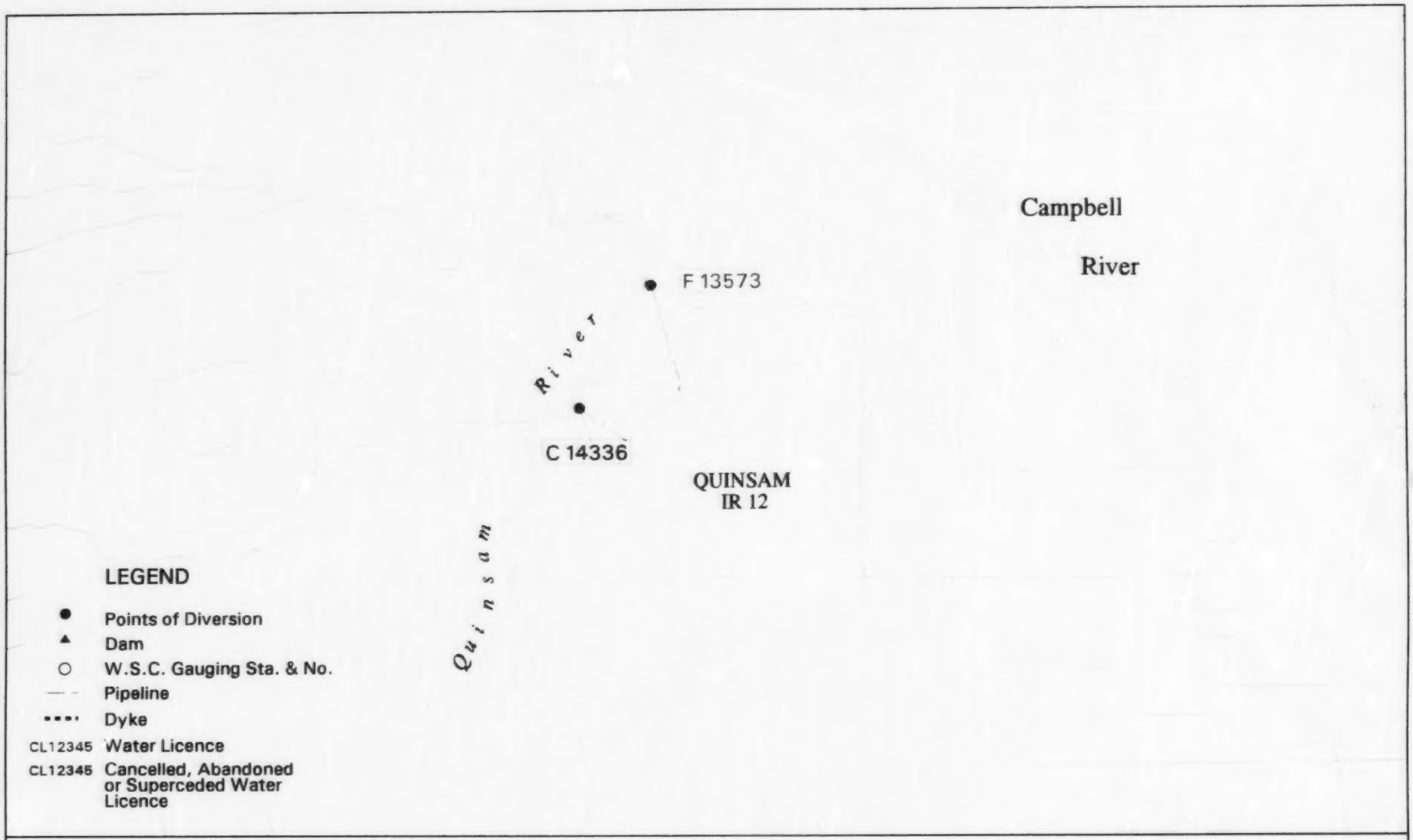
Environment & Lands Division



Discovery Passage

Scale 1:20,000

Ministry of Environment, Lands & Parks | Date: March 14, 2000 | Environment & Lands Division



Quinsam River

Scale 1:20,000

Ministry of Environment, Lands & Parks

Date: March 14, 2000

Environment & Lands Division